

MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

Vol. 9. No. 14.
WEEKLY.

BALTIMORE, MAY 15, 1886.

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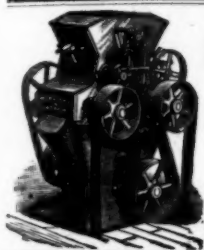
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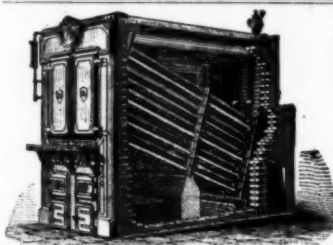
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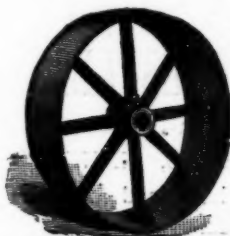
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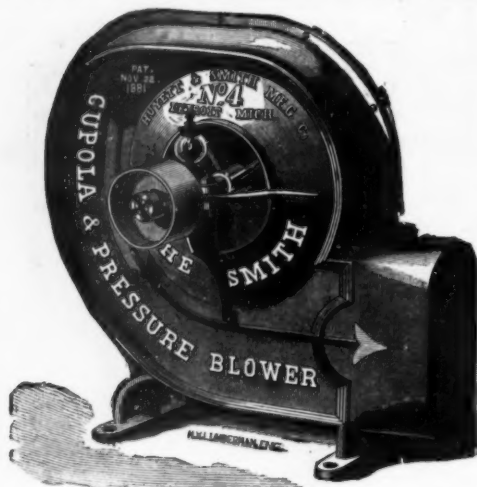
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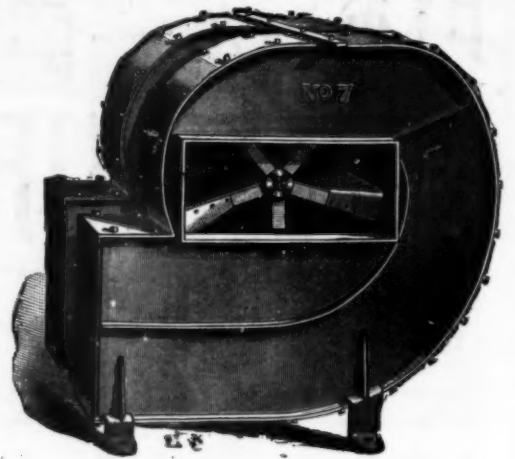


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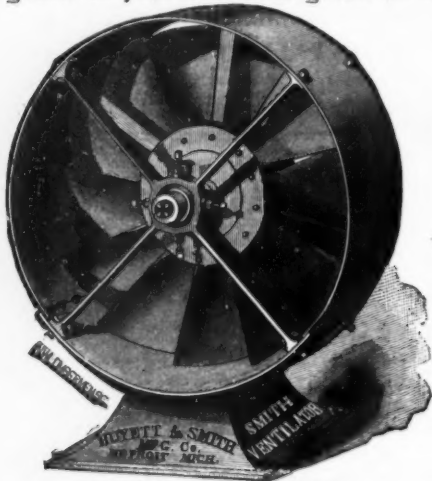


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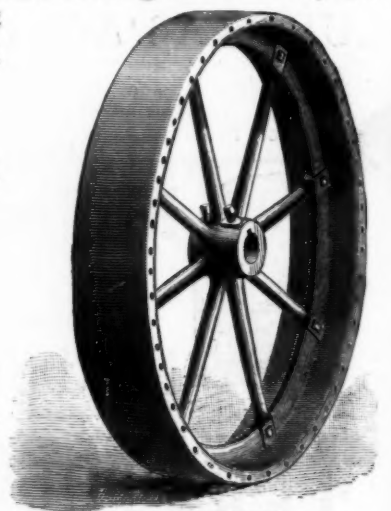
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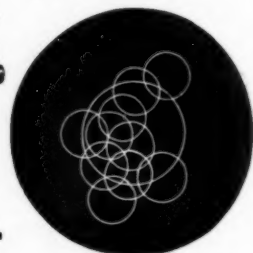
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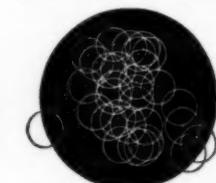
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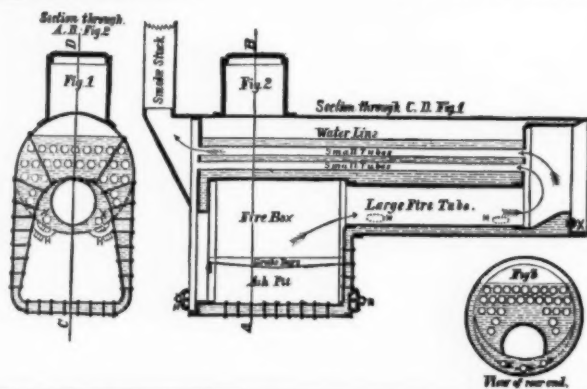
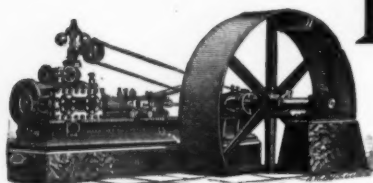
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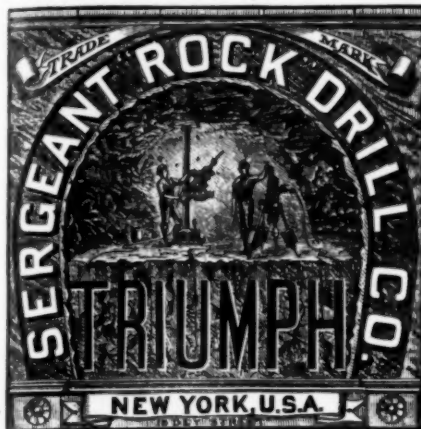
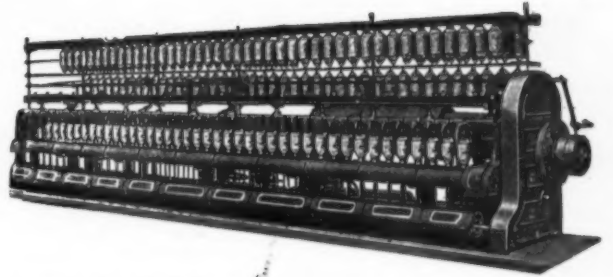
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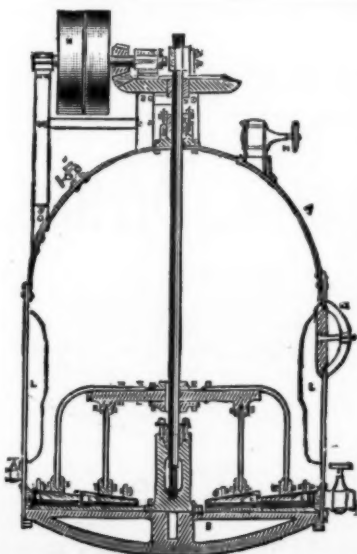
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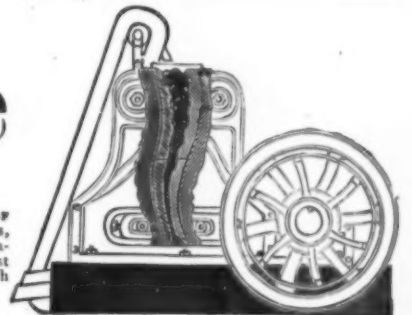
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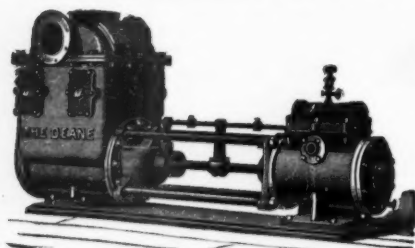
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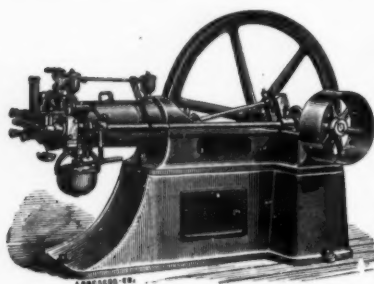
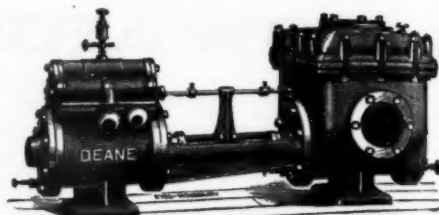
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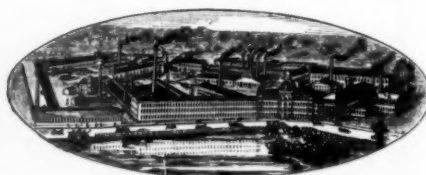
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Extra for outside pages and opposite first page of reading matter.

BALTIMORE, MAY 15, 1886.

THE total number of furnaces in blast on May 1st was 297, having an aggregate weekly capacity of 110,335 tons, against 273, with a capacity of 97,051 tons on January 1st. According to the American Manufacturer, the compiler of these figures—

"There never was a time in the history of the country when so large a furnace capacity was in blast. There have been months in those years for which statistics have been preserved when the charcoal furnaces in blast showed a larger capacity, and months in in other years when the anthracite furnaces in blast had a greater capacity, but this month's return shows the largest bituminous capacity in blast ever reported, and the total of the three capacities is greater than the total of any other date for which we have figures. The effect of this condition of affairs must be and is felt in the market. Compared with the production, the demand for pig iron is light, and prices are by no means firm. With fully \$1.00 per ton added to the cost of pig iron the last month, prices are not advanced and if anything are weaker than a month or six weeks ago. The stocks of iron are increasing also, with a possible diminished demand. It occurs to us that this a good time to consider."

THE Atlanta Constitution states that arrangements had been made for the erection of a large tobacco factory in that city and the machinery negotiated for, when it was discovered that freight rates on tobacco were relatively so much higher to Atlanta than to other places that the project had to be abandoned.

IN our Birmingham letter last week, it was stated that Montgomery, Ala., annually handled 1,500,000 bales of cotton. It should, of course, have been 150,000.

Commenting on the industrial development of the South, the New York Tribune says:

"The progress of Southern manufactures, of which the Baltimore MANUFACTURERS' RECORD again presents interesting details, is indeed a most encouraging symptom. It is worth while to observe that one great cause of this rapid development of manufactures at the South is the comparative steadiness of labor in that section and the infrequency of strikes and wrangles. Labor at the South is not so efficient, it is true, and therefore is paid less than labor at the North. Probably the entire difference in the efficiency of labor is balanced by the difference in wages. But the difference in steadiness and freedom from interruption is an enormous advantage to Southern industry. This year the strikes of the bituminous coal miners and coke workers have greatly interrupted the trade of Pennsylvania, while Virginia and West Virginia have been steadily at work, building many new coke ovens, and grasping a larger share of the trade. And now the producers of coke in Pennsylvania raise the price again in order to compensate for the losses incurred in a long struggle with the workers about wages. Meanwhile in West Virginia the old rates are maintained, and the work goes on with the building of many new ovens."

The steadiness of Southern labor, as referred to by the Tribune, is a matter of great importance to the welfare of that section. The socialistic doctrines, taught by the worst element of the foreign population, have not reached the South, and there are good reasons for believing that they will never gain the power in that section that they now hold in the North and West. As a rule Southern laborers are doing well, and are contented with their work and pay. While the West is harassed by labor riots the South is moving steadily along in the development of its resources.

DR. W. L. BREYFOGLE, a capitalist of Louisville, has purchased 200,000 acres of land in large and small tracts, ranging in size from 100 to 20,000 acres, all of which is located in Cumberland county, Tenn., and is known as Cumberland table land. The property is rich in mineral resources, is well-wooded and much of it is good grazing land. Dr. Breyfogle says:

I shall hold the land for further development. I am firm in the conviction that within the next few years this particular part of the country will become the Pennsylvania of the South. The great depression in trade in the North must force capital to create new markets and build new enterprises, or a general bankruptcy must result. It is impossible to do this in the West, as their principal product is breadstuffs, which are now produced largely in excess of the demand, and with competition in foreign markets that effectually prevent exports, there is and must continue to be a steady decline in values in that direction.

The South possesses natural wealth greater than that of any other portion of this country, and the development of the South has become a necessity to uphold the interests of Eastern and Northern capital. The active development of the South will set every wheel turning, solving the problem of the labor difficulties, and for years to come keep us on the high tide of prosperity.

The opening of the Philadelphia line of the Baltimore & Ohio Railroad for travel, which is officially announced to take place this summer, will be an event of great importance to the public. It has already resulted in a reduction in the price of tickets and an improvement in the baggage delivery service over the Philadelphia, Wilmington & Baltimore Railroad. Instead of a monopoly of the enormous business between Baltimore and the South, and Philadelphia and the North, there will now be active competition that will prove of much benefit to the public. In building their Philadelphia line, the Baltimore & Ohio Railroad Co. have spared no expense in making it one of the best and most thoroughly constructed roads in the United States. Their bridges are not surpassed anywhere in the country, while their track has been so carefully laid and so well ballasted that smooth running is assured even on the fastest trains.

It is understood that the terms of a traffic agreement have been drawn between the Baltimore & Ohio and the Reading companies for the use of the tracks of the latter and of the Jersey Central between Philadelphia and New York for a term of three years. With the final consummation of this agreement the new line will be opened for the through freight and express traffic of the Baltimore & Ohio to and from New York by way of the Chester branch of the Reading.

The Labor Troubles.

Senator Colquitt thinks our protective tariff is partly responsible for the existing labor troubles. His idea is that the protective tariff confines our manufactures to the home markets, and that they are not able to absorb all that is produced. Consequently there is frequent closing of mills and factories—an attempt, in fact, to limit production, which makes the employment of labor irregular, and, therefore, to some extent demoralizes it.—Savannah News.

If this is true what then causes the labor troubles in Great Britain? Why, with free trade and the markets of the world open to her, is there so much industrial depression, so many factories closed and so many thousands of hands out of work? The English manufacturers have no tariff at home, like we have, but still they are unable to find a market for their goods. Their production is in excess of the demand, notwithstanding their free trade and their entry to the world's markets. The condition of the manufacturing of this country is not as good as could be desired, but it is far better than in England, with all her free-trade advantages, about which the free-traders of this country are so fond of talking. They do not seem to realize that this pet doctrine of theirs has long since been exploded.

THE Sentinel, of Winston, N. C., has changed from four pages to eight, giving evidence of its well-deserved prosperity.

THE Nashville Union, in strongly endorsing the position of the MANUFACTURERS' RECORD on the tariff question and the South's need of protection, says :

"The Baltimore MANUFACTURERS' RECORD, printed north of the line, is a better friend to the South than some of our home people. It presses week after week the very idea that The Union fights for."

Appreciating the Union's compliment, we must dissent from its statement that the MANUFACTURERS' RECORD is "printed north of the line." Baltimore is a Southern city—Southern by location as well as by sentiment, and the MANUFACTURERS' RECORD is most decidedly a Southern paper, whose editors are Southern by birth as well as by sentiment. Published in the South, it is wholly devoted to the South. Its aim and object is to aid in the development of the material interests of that section. It advocates only that which we believe to be for the good of the whole South, and opposes that which we believe to be against the best interests of that section.

SOUTHERN manufacturers are not content with confining their trade to the South. They are yearly extending the scope of their business. Cotton goods and pig iron are not the only manufactures going North and West; foundries and machine shops are shipping their products to other sections also. The Milburn Gin & Machine Co., of Memphis, are finding a good market for their wood split pulleys, even in the centers of Northern and Western industrial interests. They are shipping their pulleys to Pennsylvania, to New England and to other manufacturing centers. It is a good sign of Southern progress to note such evidences of enterprise as this.

HENRY GEORGE, the writer on political economy from the labor standpoint, says to the workingmen:

Why do you merely ask for eight hours for labor—why not six, five, four, even one hour's work per day would be enough! Think of the agency of production! Think of the worth of man's intelligence! Think of that intelligence which sends a message across the ocean! Is it not capable of reducing the hours of labor so that one is sufficient for a day's work.

What a glorious time we will all have when the world gets down to the point of doing only one hour's work a day! The United States Fish Commission had better be more active in increasing the supply of fish, for when that good time comes we will all want to go a fishing.

THE Granite Falls Cotton Manufacturing Co., of North Carolina, have declared a 10 per cent. dividend, and applied 5 per cent. to the purchase of new machinery, their net earnings for the year being 15 per cent.; not a bad showing, considering the general condition of the cotton trade during the first part of 1885.

A PRETTY good stock to own is that of the Elyton Land Company of Birmingham. Their usual dividend is 10 per cent. a month, so our Birmingham correspondent writes, but last month, in view of extra large sales, they paid 40 per cent.

OUR BIRMINGHAM LETTER.

A Big Dividend—Increasing Immigration to the South.

[Special correspondence MANUFACTURERS' RECORD.]

BIRMINGHAM, ALA., May 10, 1886.

Notwithstanding strikes and labor troubles elsewhere, things in Birmingham seem to move along in the regular grooves without any appearance of change. At the same time, it must be admitted that the trade difficulties which have been annoying leading centres of production and distribution, have not been without their effect upon our iron market. For a week past the dullness in Eastern and Western markets has been reflected here, and sales have been consequently lighter and slow. Probably they could have been forced with a moderate degree of concession on the part of our iron masters, which, however, is not on the cards, as the belief is general that the depression is only momentary, and will disappear with the settling down of affairs this week. Quotations, although to a certain extent nominal, are unchanged from the latest previous report.

But while the labor difficulties may affect iron, neither that consideration nor anything else seems sufficient to repress the steady upward movement of city real estate and mineral property in this district. The operations of the week past have been considerable, and, in some instances, notable. The famous corner opposite to the Alabama State Bank, the history of which I have written hitherto, has again changed hands, or rather 50 feet of it. This particular piece was bought for \$21,000 about three or four months ago. Last Wednesday it was sold again to Messrs. Boddie & Handley, two of the leading real estate operators of Birmingham, for \$35,000. Last week the Elyton Land Company held its annual meeting, re-electing its old board of directors and the retiring officers. As a rule, this successful corporation declares a cash dividend of 10 per cent. per month. During the past month, business having been better than usual, the company varied the usual routine by declaring cash dividends amounting to 40 per cent. of the capital stock. For the greater part of the week property changed hands at the rate of \$100,000 per day, as far as reported. The extent of trading among all classes of the population, and the absence of any official organization of the real estate interest, makes it quite impossible to measure the transactions from day to day with anything like accuracy.

Railway movements are still active. Capt. Grant is to have 3,000 men at work on the Kansas City, Fort Scott & Gulf, beginning at the Birmingham end, within the month. The survey of the Mineral Railway extension is nearing completion, and work on the extension of the Georgia Pacific is being pushed rapidly. Other railway developments of which I have written still occupy the attention of capital. It becomes, I think, more and more evident that the proper policy for Birmingham to pursue is to promote the interests of Pensacola as a competing point for the output of this district. This policy need not detract from the claims of New Orleans and Mobile to consideration as important Gulf seaports and markets, but it would probably stir them up to local exertions, which would be an excellent thing for all parties. For example, Mobile has always done a great deal of missionary work in the way of inviting outside capital to come in and make developments, the same being calculated to help the port and the State, but there has not been a corresponding willingness on the part of the local capitalists and business men to back with their own means what they have so energetically proposed to others. This is what I gather from common

report, and is not intended as any unkind fling at Alabama's single maritime city. New Orleans has reached out more, but not to the extent possible or practicable. A movement tending to put Pensacola in position to compete with her Gulf neighbors would be likely to awaken the latter to renewed efforts in the way of progress and improvement. That is exactly what we need. Active competition between New Orleans, Mobile and Pensacola for the iron and coal products of Birmingham would greatly benefit all interests here, and, from another point of view, the improvement of Pensacola in transportation and harbor facilities would prove of immense advantage. I have before this endeavored to show that Birmingham's direct Gulf line points to Pensacola, and what is of still more importance, that the harbor in question is the one deep water harbor of the American Mediterranean. At a small expense all the facilities necessary could be had for the coaling and loading of the fleets of the hemisphere. The splendid docks and buildings and the plant of the disused government navy yard might be bought and devoted to wharfage, warehouses, and so on.

Not long ago a distinguished and progressive citizen of this State at Washington met the admiral commanding the Atlantic fleet of the Spanish navy, and asked the latter if he should not prefer to run over to Pensacola to coal rather than to have the fuel delivered in harbor at Cuba by sailing vessels. The admiral replied that, supposing he could get cheap coals and dock facilities at Pensacola, he should go there to coal as a matter of course; that Pensacola was by all odds the best natural harbor for such purposes in the Western World, and might undoubtedly be made the supply station for all the fleets of the great powers on the American station. If Pensacola lacks in general enterprise and push, it makes up for it to some extent by possessing an energetic, able and progressive newspaper as any Southern city. The Pensacola Commercial, to whose columns I am often indebted for new and good ideas anent the possibilities of this valley, is thoroughly in sympathy with the movement to make its town and harbor prominent factors in the industrial development of the region. The Commercial agrees, too, with the views I have ventured to present in the MANUFACTURERS' RECORD in regard to a possible union of Western Florida with Alabama, and believes that such an achievement would redound to the advantage of both communities. I do not know how feasible it may appear after farther canvass. Probably nobody on this side would question the advantages to Central Alabama and the industrial districts of the State. On the other hand, whatever influence Mobile could swing would very likely be thrown against the project, and there may be antagonistic influences in Florida as well. All the same, as a commercial proposition the union could not fail to be beneficial to Alabama.

Although it does not appear on the surface of affairs very prominently, it is nevertheless true that a strong and increasing tide of desirable immigration has set in towards the best known districts of the South. It is largely from the North and Northwest, as far as its agricultural elements are concerned. One special feature of the movement is the rapid settling up of the Calcasieu Prairie district of Louisiana by well-to-do farming people from Iowa and Nebraska, who are taking up large holdings and making improvements of a sort little known heretofore in that part of the section. Western Florida, particularly the "Highlands" tributary to the Pensacola & Atlantic Railway, is receiving important accessions of population, attracted by the varied products of the locality, which command ready and paying markets near at hand. It is hardly necessary to call attention anew to the steady stream of immigrants

of the best class who are coming in to Tennessee and Alabama. At all the mining and manufacturing centres of both States there are numerous arrivals daily, and these are almost entirely of people who come either to stay or to invest their money. Eastern Tennessee, through the efforts of Col. McWhorter, the State commissioner of immigration, agriculture and labor, has taken on an aspect of activity which must prove more than surprising to persons who have not been through the country for several years. As for Birmingham, the strangers come pouring in at such a rate that they are beyond estimate. I have yet to find one who has come with any means who has not made a handsome turn within 30 days of his arrival. One has to travel outside of Birmingham to learn that there is any such thing as depression or hard times.

G. B. WEST.

The Resources of Eastern North Carolina—A Railroad Needed.

[Special correspondence MANUFACTURERS' RECORD.]

TRENTON, JONES CO., N. C., May 7, 1886.

The eastern counties of North Carolina have never received that attention from capitalists and settlers to which they are entitled. Abounding in natural resources; blessed as a whole with a healthful climate and prolific soil; situated so near the ocean that it will never cease to be a practical obstacle to the creation and maintenance of railway monopolies; with two-thirds of its lands covered with virgin forests containing many varieties of valuable timber trees; with its sounds, rivers, bays and inlets, affording unlimited opportunities for fishing industries; with immense areas on which stock raising could be prosecuted to advantage, there is every reason why this part of the Old North State should become one of its most populous and prosperous subdivisions. Nothing but lack of information concerning it has kept great numbers of people from coming into this section and availing themselves of these vast and varied sources of wealth. One great need at present is the construction of additional railroads through this fertile region. Any railroad map will illustrate this need. The Wilmington & Weldon Railroad, running almost due north and south between the cities for whom it was named, forms the Western boundary of the twenty or more counties which comprise this section. The Norfolk Southern runs through the six counties of the northeast corner of the State, terminating at Edenton, one of the oldest cities in the Union, but carrying Northward the produce of that large portion of this region which fronts upon the sounds. A short road connects the mouth of the Roanoke River with the Wilmington & Weldon system at Rocky Mount, and a still shorter one, starting from the same point, runs to Washington, the capital of Beaufort county. Besides these there is but one other, the Atlantic & Carolina, which connects with the Wilmington & Weldon and Richmond & Danville at Goldsboro, its western terminus, and passing through New Bern, where, by way of the Neuse River, its patrons can reach the sounds, it continues on to the ocean at Beaufort Harbor. Between these several railway lines are great stretches of territory whose people must either cart their produce long distances to market, or else must put it aboard some one of the small steamers or sloops engaged in the river traffic, or, finally, must dispose of it to his country merchant at considerably less than its real value. This absence of convenient transportation facilities is one reason why many of the farmers of Eastern North Carolina continue poor; but there is another that has been still more potent, viz: the craze for land. By far the greater number own much more real estate than they can comfortably carry and often fifty to seventy-five per cent more than they can possibly cultivate. They are land poor, and in

multitudes of cases would enrich themselves by giving away from one-third to one-half of their real estate, and by concentrating their energies and their capital every year on one-half the land they try to till. Labor and fertilizers are now spread over such broad areas that fields are not properly tilled and crops are poor. Of course there are many notable exceptions to this too general condition of affairs. There are planters and small farmers whose places always proclaim the skill and practical wisdom of their owners. There are model farms to be seen, equal to any the West or North can show, which are slowly exercising an influence for good in the country round about them. But the real need of all these broad, beautiful and fertile counties is a railroad near at hand. Wherever one has been constructed in this State within the last twenty years, it has revolutionized the agricultural and general business of the country through a belt at least ten miles wide on either side of its track. The same good results would follow in all these Eastern counties, and especially in those lying between the Atlantic & Carolina, and the Wilmington & Weldon railroads. The map shows that these roads, with the ocean shore line as the base, and Goldsboro as the apex, form an equilateral triangle, within which are all of Onslow, Jones and Dublin counties, and the principal parts of Pender, Wayne, Lenoir, Craven and Carteret, which eight are among the richest counties of the State in their natural elements of wealth—elements that have been but touched upon and never approximately developed, even at this writing.

How shall this great need of these Eastern counties be met? That is a question not only for the people of these counties, but also for the several transportation lines that have an interest in the movements of freights and passengers through this region to determine. Some man or body of men, or some corporation, will eventually decide it, and whoever may be wise enough to do it first of all, whether that first be an individual or a corporation, will have a bonanza surpassing that that has long been held and enjoyed by the fortunate stockholders of the New York, New Haven & Hartford Railroad, the biggest dividend paying railroad company of any in these United States. While a careful examination and analysis of the census reports of 1880 will show to any experienced compiler the number of bushels of corn, wheat and potatoes raised in these eight counties, as well as the number of bales of cotton, they fail to enumerate so many essential items of the agriculture of this region, and of the marketed products of its fisheries and forests, while absolutely overlooking its shipments of fruits and early vegetables, that to make a compilation from those reports would be to give a most inadequate idea of their productions at the time the census was taken, and of their power to produce, had they the needed facilities for marketing all they could raise.

For a decade the people of these counties have been hoping and expecting that railroad facilities would soon be extended to them, that would ensure good prices for their land and water products, open up these sparsely settled regions to settlement, bring customers and occupants for their surplus lands, and in all ways help them to make the most of their grand natural advantages. The one thing they desired above all others was the extension of the line now running from the Roanoke river down through these counties to the broad water of the New river. Were this done, the company owning that line would possess a road with the best local freight traffic of any in this country. That is a very broad statement, but fully warranted by facts. Such a road would cross near the heads of navigation of all the rivers flowing into Albemarle and Pamlico sounds, and its freight trains would be supported by the tributary fisheries, were there

no other sources of revenue. Add to these the forestry products, the immense freights of truck, the naval stores, the cotton, corn, and other agricultural products, that would naturally seek it as an outlet, and the total would reach a most desirable sum. Without any passengers such a road would pay enormously. But in addition to its freights the road suggested would do in time an immense passenger traffic every winter. Beaufort is an extremely pleasant place to pass the late winter and early spring. Between there and Wilmington are several points where waterfowl of all kinds are as abundant as at any place in the Currituck sound. Where are also splendid shooting grounds for deer and wild turkey, easily accessible; while sportsmen who prefer field shooting can put in their dogs and find large coveys of quail in the immediate neighborhood.

In fact, Southeastern North Carolina is the sportsman's paradise, known at present to comparatively few, but destined at no distant day to be the winter and spring resort of thousands seeking health and pleasure.

For such a railroad as has been suggested, the way is open. The Norfolk Southern runs now to Edenton. Another road runs from Jamestown to Washington. Unite these two, build a continuous line to the A. & C. road, cross it at a convenient point, and then continue it to the broad waters of the New river, below Jacksonville. The people of Trenton, who are on the most direct line for such an extension, have a splendid roadway, eight miles long, finished from the A. & C. railroad, at Cave Creek, through the Pocoson to their village, which will be given to any company that will build upon it.

The good people of New Berne will do their utmost to have the connection at their city; but, whether built by that route, this, or any other, such a road would pay dividends to its stockholders and open up the richest section of agricultural land to be found between Maine and Florida on the entire Atlantic coast. B. S. P.

Western North Carolina.

[Special correspondence MANUFACTURERS' RECORD.]

BREVARD, N. C., May 6, 1886.

Brevard, the county seat of Transylvania county, N. C., is in the heart of the Alleghenies, near the headwaters of the French Broad river, 35 miles southwest of Asheville, with an elevation of 2,600 feet. It overlooks the wide and lovely valley of the French Broad, whose fields of rye, wheat and grass sparkle with the morning dew. The valley here is about two miles wide, and is regarded as the garden spot of Western North Carolina.

So much has been written about the climatic attractions of Western North Carolina, that it would be superfluous to say much here, except that we claim, and justly too, advantages over points more prominently known. Our climate is not surpassed in the world. Surrounded by lofty peaks of the Blue Ridge, we are protected from the cold blasts of winter, while in summer a gentle breeze is wafted down from them which seems to fan the heated waves away. This is the place for any one suffering with pulmonary troubles or delicate in any way. The pure, light, dry, bracing air relieves any oppression and invigorates the whole system. Visitors frequently express surprise at the deep, sweet, refreshing sleep they enjoy.

Our mountain scenery is grand in the extreme. In a day one can visit a dozen points overlooking the valley, no two views alike, and feast his eyes on a panorama of beauty—Nature's sublimest efforts. Waterfalls are numerous and many of them truly wonderful. A picnic at the foot of one of these cool, refreshing spots in June or July is an event pleasantly remembered.

The fertility of the soil of our valley is marvelous. Having an abundance of lime, easily procured from the surrounding mountains at a small cost, farmers are enabled to keep up the land in fine condition. Corn, hay and cereals are the principal crops, while the mountain cabbage has gained quite a reputation for its delicacy of flavor. Potatoes and other truck are produced in sur-

prising quantities with but little labor. Fine tobacco can also be grown on hillsides equal to any in the world.

Our county boasts of the finest beef cattle in the South. The sight of a car-load of fat steers being weighed on the cattle scales preparatory for shipment to market would make an Englishman's very soul rejoice. All other stock flourish. The sheep industry could be made profitable by raising the finest wool. A pig in chestnut time is extremely happy.

Cool, refreshing springs abound everywhere, furnishing water of the purest quality. The French Broad, in its serpentine course through the valley, is fed by thousands of small streams coming down from the mountains with water as clear as crystal. On most of these rivulets are fine sites for mills, with abundant power.

Trout fishing is a pleasant recreation for those fond of the rod and line, while in the French Broad large fish are taken in various ways. Deer, wild turkeys, grouse, partridges and other game are plentiful, and occasionally we hear of a mountaineer's exploits with bruin in the back laurel thickets.

Fruits of many kinds do well here, especially the apple, which grows to perfection with little care. We have many valuable seedlings originating here with local reputation for keeping qualities. It is not uncommon for a tree to produce 50 bushels of fine fruit annually. We can just beat the world on apples.

Minerals are found in considerable variety. Mines of mica, gold, asbestos, &c., are profitably worked.

In our mountain coves is found the finest of timber. Walnut, cherry, ash, beech, birch, hickory, oak, maple, poplar and other valuable woods can be had in perfection.

Labor, mostly white, is abundant, reliable and cheap.

Schools are about on an average with other places. It would be difficult to find a more suitable location for a large academy, on account of the quiet disposition and soberness of our people, the healthfulness and beneficial effects of our climate, and so many natural attractions for the young.

Religion and churches are about on a par with other points. We should be the best people in the world; we have so much to be grateful for—no tramps, no strikers, no drouths, no floods, no malaria, no mosquitoes.

I would especially direct attention of capitalists to the feasibility of erecting here a first-class hotel. A more attractive point for the tourist cannot be found, and, with a good line of light hacks to convey pleasure seekers to points of interest, a hotel here would surely pay handsomely.

In conclusion, let me say that we have plenty of room for any number of settlers. If any one wishes to farm, if a stock breeder, if a lover of fruit, a mineralogist or machinist, let him come and he will be welcomed.

I shall be glad to furnish at any time any information desired concerning this section. S. E. LUCAS.

Tuskaloosa, Ala.

[Special correspondence MANUFACTURERS' RECORD.]

TUSKALOOSA, ALA., May 8, 1886.

Our town "is not dead, but sleepeth." We have had an unprecedented flood, but less damage was done on our river than on many others. Farmers are as busy as bees finishing up planting and giving their crops, on the uplands, their first working. A "dry May" always gives us a good crop. The appropriation to our river by Congress gives us hope that we are upon the threshold of better things to come. Situated as our beautiful town is, at the head of navigation, within a mile and on for miles of the great Warrior coal deposit, and within 15 to 20 miles of known valuable iron ores, it is surprising that capitalists have not seen and availed themselves of the superior advantages offered for almost every class of manufacturing industries, such as furnaces, rolling mills, cotton, woolen and furniture factories. Mr. Woodward, of Michigan, has purchased many acres of fine pine lands up the river, and intends floating logs down to his mills, a mile below town. This, we hope, is but

the beginning, and will lead to other and larger enterprises. We have but one railroad, but a line of 35 miles would connect us on the north with the Georgia-Pacific and at the junction of the Sheffield & Birmingham Road, and it is thought Mr. de Bardeleben and others will build a road from Jonesboro down through the fine coal and ore lands, between the river and the A. G. S. Railroad, giving him water transportation to Mobile for coal and iron. You may ask why these enterprises lag? Well, it is easier to build a new town than it is to breathe new life into an old one. People, like road wagons, get into ruts, and it is hard to pull out of a rut. Our fathers and grandfathers are here yet, and you know they are a wise, cautious, plodding, but remarkable class of people, and our young men frequently steal off and find employment elsewhere, thus keeping us at about a standstill. But I tell you and your readers that Tuskaloosa has a future, and when the dawn breaks upon her she will not be altogether a town without houses or people. I believe that a farm implement factory would prove a grand success at this point. Here, and South and West of us, is a very fine farming region, which would sustain an establishment of the kind beyond a doubt, as our timbers and minerals are at hand and abundant. Oak and hickory abound, and no hard woods are superior to ours. When the government begins to open the river up to permanent all-the-year navigation to the gulf, moneyed men will find a rich field for investment in the refined, educational center of Alabama, unsurpassed by any other in the State. When they come and start the wheels of enterprise and development, our boys will roll up their sleeves and say "give us a chance." Our schools and colleges are in a flourishing condition; our cotton and yarn mills, our foundry and machine shops, are doing well. But people sometimes think unless they can bore with a big auger it is no use to bore at all, but my judgment is that small industries are better for a town than huge plants overshadowing and crowding out the less pretentious. Of course, the larger ones catch the eye much more readily and give reputation to the town. For the amount of capital employed, I expect our small enterprises pay as well as any in the State. But we need new men—men with vim and capital. They will come after a while, and I assure you they will be welcome. WARRIOR.

A Comparison of the Prices Paid Laborers in Europe Under Free Trade and Tariff Legislation.

The following inquiry and the answer to it are from the Philadelphia Press:

"In discussing the tariff question with a friend, he asserted that England pays her laboring classes twice as much as France pays hers and one-third more than Germany pays hers.

Not having better figures to present, I had to concede that much, but with doubts as to the reliability of his information.

Can you tell me whether the assertion is true, and if it is not, can you correct it?"

Common labor in France is paid 70 cents per day of ten hours' work. This is precisely what the English laborer receives, though in some parts of England he is glad to accept 2s. 6d. (62½ cents). Mechanics are paid from \$1.20 per day to \$1.50, and even \$2. They get no more in England. The wages paid labor in the coal, iron and steel districts of the Department of the Loire vary for men from 70 cents per day, about the same as the English laborer, and from that as a minimum the wages rise to a maximum of \$1.50 to \$2 a day in branches requiring considerable skill.

In the great manufacturing regions of Germany under free trade what your opponent said may be true, but, since the empire returned to a protective tariff, wages have gradually increased, especially in the mineral and iron and steel industries. Below, for example, we print a table showing the weekly wages paid in coal mining in England and Germany:

Occupation.	England.	Germany.
Hewers.....	\$5 80	\$5 04
Tunnelers.....	5 04	4 96
Shifters.....	5 04	4 96
Wastemen.....	5 04	5 04
Bankmen.....	4 96	4 96
Screenmen.....	4 96	4 00
Helpers-up.....	5 04	5 04
Drivers.....	3 75	3 50
Furnacemen.....	3 96	3 86
Switchkeepers.....	3 50	3 40
Cartmen.....	4 80	4 50
Smiths.....	5 70	5 70
Joiners.....	6 90	6 00
Engineers.....	6 90	6 00
Firemen.....	4 08	4 00
Plate layers.....	4 08	4 00

The English rates are taken from the British Blue Books, and the German rates were obtained in some cases direct from the manufacturers' books by a member of the Press editorial staff in a trip through Northwestern Germany. House rent in the coal districts of Germany is about half what it is in England, and the cost of the other necessities of life is also less. The Dortmund district, from which the above figures were obtained, produces nearly one-half of the coal produced in Germany. The miners there are better off than the miners of Staffordshire and South Wales. In Krupp's, at Essen, no man is paid less per day than 75 cents, while in the great iron works at Dowlais, Wales, the Press correspondent found men working for 62½ cents per day.

Below we give the actual amounts of money earned per day by the workers in the Union Iron & Steel Works at Dortmund, during the year 1883 (taken from the books of the company by permission), and the published rates for similar work in England:

Occupation.	Paid per day, Germany.	Paid per day, England.
Puddler (first hand).....	\$1 20	\$1 20
Puddler (second hand).....	1 00	75
Furnace-man (first hand).....	1 30	1 60
Furnace-man (second hand).....	1 00	80
Laborers.....	75	68

The striking fact is here brought out that common labor in Great Britain is actually sinking below that of protective Germany, and that skilled labor is either paid the same, or, in one instance, a trifle more. In the Bessemer Steel Works at Dortmund, the ordinary hands received \$1 a day; the common laborer or yard hand, 75 cents; the hammer-man \$1.30 per day; furnace-man, \$1.10; rolling mills' men, \$1.30. These figures are not much lower than the English rates. The return to protection has benefited all the principal industries in Germany. In the iron and steel industries in four years it added \$2,000 to the number employed, it increased the wages not only of the original 154,000 workmen employed, but of each of the 205,000 17.4 per cent. It was beneficial every way, and within two months the British Charge d'Affaires in Germany, himself a free trader, in an official report to his government has acknowledged the truth of these and kindred statements.

Your opponent is entirely mistaken as to France. The Department of State said on this subject in 1884: "For the last few years labor has been at about the same price in England as in France. The cost of labor has remained stationary in England (it has rather decreased, as has been seen) while it has advanced in France 20 to 25 per cent." The following table, from the official reports of the United States Government, shows that in some industries wages are higher in France than in England:

Highest weekly wages in France and England in 1884:

Occupation.	France.	England.
Blacksmiths.....	\$ 7 90	\$7 80
Potters.....	11 58	9 50
Cabinet-makers.....	7 90	8 80
Furriers.....	8 50	8 50
Lithographers.....	9 00	8 50
Millwrights.....	9 80	8 70
Glassmakers.....	9 65	8 48
Carpenters.....	12 78	9 00
Pressmen.....	11 00	8 76
Engravers.....	12 45	8 50
Paper-rulers.....	11 87	8 50
Saddle and harness makers.....	7 25	7 80

In the mills and factories under precisely the same conditions there is very little difference if absolutely accurate comparisons could be made. On the other hand, wages in free-trade England, of late years, have steadily declined. In some industries, perhaps, they may be lower, but the surrounding circumstances make life easier. The masses of the people in France are as well to do as those of England, and especially is this the case in Northwestern France. In the Northwestern part of Germany, and in the great industrial regions, the workman is also as well off as in England. In Southern Germany, and in the purely agricultural regions, wages are low, but no lower than in the agricultural counties of England—in both cases labor barely receives enough to eat and sufficient clothes to wear.

CONSTRUCTION DEPARTMENT.

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

A jail will be erected at Sheffield, Ala.

The Birmingham Water Works, Birmingham, Ala., will spend \$10,000 in boring an artesian well.

ARKANSAS.

The Pulaski Gas Co., Little Rock, Ark., will build new works. Work has been commenced.

Plans have been prepared for a new courthouse to be erected at Little Rock, Ark., to cost about \$60,000.

An iron foundry has been started at Conway, Ark.

Pettefer & Bro. will erect an iron cotton warehouse, 50x140 feet, at Little Rock, Ark., for the D. E. Jones Co.

The Quapaw Cotton Mills Co., Little Rock, Ark., will put in considerable new machinery and enlarge their building.

A stock company will soon be organized at Helena, Ark., to erect a large cotton compress.

A large steam saw mill is being erected near Magnolia, Ark., by Mr. Steele.

A \$10,000 church will be built at Hot Springs, Ark., by the Catholics.

The Kansas City & Memphis Railroad & Bridge Co., capital stock \$2,000,000, has been incorporated in Arkansas to build a road from Marion, Ark., to Memphis, Tenn. The directors are George H. Nettleton and Wallace Pratt, of Kansas City, Mo., and John E. Beck, J. F. Smith and William A. Vance, Jr.

Mr. Sanders and others will organize at Hot Springs, Ark., the Caddy Mining Co.

Mr. Haller will erect a lumber mill at Harrisburg, Ark.

D. C. Cole has erected two large saw and planing mills at Harrisburg, Ark., and Goulette Bros. have erected a large lumber mill.

D. H. Thomas and A. D. Thomas will manufacture cotton presses at Morrillton, Ark.

FLORIDA.

Cook & Libby will soon double the capacity of their planing mill at St. Augustine, Fla.

Daniel Bros. & Blum are purchasing machinery for manufacturing bricks, for their works at Tavares, Fla., previously reported.

J. P. Pool will probably start brick works at Palatka, Fla.

N. W. Clark has established an artificial stone factory at Lakeville, Fla.,

The Apalachicola Ice & Canning Co. has been organized at Apalachicola, Fla., with H. D. Stratton, of Columbus, Ga., as president.

The Eureka Steam Brick Manufacturing Co. has been formed with W. A. Tate as president, and J. A. Roche, secretary and general manager, to operate the brick works, 7 miles from Jacksonville, Fla., formerly owned by Tate & Solary. New machinery has recently been purchased.

A saw and planing mill will be erected at Mount Dora, Fla., by Tufts & Libby.

GEORGIA.

Andrew J. Rogers, James M. Olmstead, Henry S. Welles, Daniel W. Clark, George E. Smith, John E. Sanders and Frederick G. Brunel have incorporated at Brunswick, Ga., the Brunswick Land, Improvement & Colonization Co., to establish steamship lines, ship yards, coaling stations, &c.; to build gas and water works, brick yards, warehouses and hotels, and to engage in any or all kinds of manufacturing. The capital stock is \$100,000, with the privilege of increasing to \$10,000,000.

The Georgia Marble Co., Atlanta, Ga., will expend \$200,000 in making extensive improvements at their quarries.

A cotton-seed oil mill and guano factory, to be erected by a stock company, are projected at Crawford, Ga.

The Georgia Slate Co., capital stock \$200,000, has been incorporated at Atlanta, Ga., by John D. Pope, John D. Lewis and Samuel McKelvey, to quarry and manufacture slate and stone.

Mr. Wisenbaker will rebuild his saw and planing mill near Valdosta, Ga., reported in this issue as burned.

George Edwards, Brunswick, Ga., will erect a saw mill.

KENTUCKY.

W. B. Winslow, H. M. Winslow, H. Schuerman, Jr., O. W. Geier, J. E. Grobmyer and H. C. Grobmyer have incorporated at Carrollton, Ky., the Carrollton Furniture Manufacturing Co., capital stock \$100,000.

J. H. Hodge & Co., Henderson, Ky., will erect a large new tobacco factory to increase their capacity.

The Common Sense Fertilizer Co., Louisville, Ky., will rebuild their works reported in this issue as burned.

Pittenger, King & Co. have received the contract to erect a building at Georgetown, Ky., for the Children's Home. It will cost \$11,751.

Bills have been introduced in the Kentucky legislature to incorporate the Hardie County Natural Gas Co. and the Bullitt County Natural Gas & Heating Co.

LOUISIANA.

Etie & Spellman are starting a brick yard at New Iberia, La.

The contract to build a new courthouse at Opelousas, La., has been let to Hannan & Vauss, of Baton Rouge, at \$20,850.

MARYLAND.

The canning factory of D. S. Truitt, Greensborough, Md., is being enlarged.

Manekee & Waters, Burnt Mills, Md., have ordered a large amount of new machinery for their flour mill.

The Susquehanna Water Power & Paper Co., Shure's Landing, Md., have purchased water power property on the Potomac River and will operate a pulp mill.

MISSISSIPPI.

Mr. Wise, of Cleveland, O., will erect the factory at West Point, Miss., reported last week. It will be a sash, blind and stove factory.

It is stated that the Yocona Mills, Water Valley, Miss., will put in 100 additional looms.

Subscriptions are being received at West Point, Miss., toward the erection of a cotton factory. The building of a foundry at the same place is contemplated.

W. E. Beck & Co., Vicksburg, Miss., have purchased machinery for a steam bottling establishment.

NORTH CAROLINA.

A basket factory has been started at Jamestown, N. C., by J. H. Johnston.

Thomas Ward will move his foundry and plow factory from Harper's to Fayetteville, N. C.

A. G. Kinsey will soon develop his mineral property near Murphy, N. C.

A. S. Hadaway is opening and will develop a mineral paint mine near Murphy, N. C.

Northern parties have purchased a new silver mine in Ashe county, N. C., and will develop it.

W. D. Sprague contemplates adding machinery to his stove and barrel factory at Old Fort, N. C., to manufacture buckets.

A saw and grist mill has been erected at Sanders' Store, N. C., by J. W. Sanders & Co.

SOUTH CAROLINA.

The Oman & Stewart Co., of Nashville, Tenn., have received the contract for granite and brick work at the State house, Columbia, S. C. The contract for the iron roof was let to Bartlett, Hayward & Co., at \$20,784, and the contract for the heating apparatus, at \$15,370, to Thomas C. Basshor & Co., both of Baltimore.

The Newberry Cotton Mills, Newberry, S. C., previously reported as to put in additional machinery to fill their mill, will increase their capital stock \$75,000.

TENNESSEE.

The Cole Manufacturing Co., Memphis, Tenn., are moving the machinery of their planing mill and factory to their new building.

A grist mill is being erected at Henopson, Tenn., by John Seats.

The office of the Speers Wadding Co., reported last week as incorporated in Tennessee to manufacture leather, is Memphis. The incorporators are N. W. Speers, Jr., J. E. Randle, W. I. Cole, H. J. Lynne and J. A. Omberg.

A grist mill is being erected at Bank, Tenn., by A. Kennedy.

James Baylor Lewis, H. Wheeler, W. S. Marshall and O. H. Pennock have incorporated at Chattanooga, Tenn., the Chattanooga Natural Gas & Heating Co., to bore for natural gas, erect gas works, &c. 15,000 acres of land have been leased by the company.

Two new engines and a train of rolls have been purchased by the Lookout Rolling Mill, Chattanooga, Tenn.

The Memphis & Southeastern Railroad Co. has been incorporated in Tennessee, to build a road from Memphis to the Mississippi State line, to connect with the Kansas City, Memphis & Birmingham Railroad.

An effort is being made at Chattanooga, Tenn., to organize a stock company with a capital stock of \$200,000, to erect a cotton mill of 10,000 spindles.

Read, Lee & Gaskill will erect at Chattanooga, Tenn., a three-story building at a cost of \$17,000.

Adams Bros. have the contract to erect a \$10,000 building for the Steele Orphan Home, Chattanooga, Tenn.

TEXAS.

The flour mill of the Brown County Milling Co., Brownwood, Texas, previously reported as burned, will be rebuilt.

S. Marke, of Iowa, will build a brewery at Fort Worth, Texas, if the citizens of that place will raise \$3,000.

The San Antonio Club, San Antonio, Texas, will build an opera house at a cost of \$75,000.

The Gainesville Ice Co., Gainesville, Texas, are putting in new boilers and other machinery.

The money to build the roller flour mill at Valley Mills, Texas, previously reported, has been raised, and the contract for its erection will soon be let.

The Farmers' Alliance of Van Zandt county, Texas, will erect a flour mill at Wills Point.

A \$20,000 school building is to be erected at Longview, Texas.

J. T. Donovan will put rolls in his flour mill at Lampasas, Tex., this summer.

C. H. Guenther & Son will put some new machinery in their flour mill at San Antonio, Tex.

Sherman, Texas, is agitating the building of water works. Plans and estimates are being prepared by A. S. Hayne.

A. J. Brown and Mr. Snyder will organize a company to build a \$15,000 roller flour mill at Alvarado, Texas. \$10,000 has been subscribed.

A railroad will be chartered in Texas, to extend from Wichita to Brownwood.

The contract to erect a school building at Hempstead, Texas, has been let to James Dawson, of Navasota, at \$7,389.

Z. P. Dederick has purchased the Sherman Iron Works at Sherman, Texas, for \$10,000, and will spend about \$15,000 in enlarging the building, repairing the old machinery and the purchase of new.

Russell Myerick, Caleb W. Dawley and R. C. Foster have incorporated at Denison, Texas, the Denison Crystal Ice Co., capital stock \$30,000.

VIRGINIA.

Norfolk, Va., has appropriated \$12,000 to build a school-house.

Mr. Wright will build a creamery at Waynesboro, Va.

It is reported that the Wythe Lead & Zinc Mine Co., Max Meadows, Va., will erect a "Two Block" plant at their mines.

The Norfolk & Western Railroad Co. will sell \$1,000,000 worth of their bonds to be used in the extension of their branch lines.

WEST VIRGINIA.

C. W. Boyd, Ripley, O., William Sharpe, Charleston, W. Va., and others have organized the Black Diamond Coal Co., at Charleston, to operate the coal mines lately worked by the Macfarlane Coal Co. The capital stock is \$10,000.

It is reported that a flour mill will be erected at Cairo, W. Va., by James McKinney & Bro.

BURNED.

The saw mill and gin of James Barrett, Ben Hill, Ga. Loss \$3,000.

The saw mill of M. J. Shover, Lancaster, S. C.

Akin Harrah's saw mill, at Asbury, W. Va.

The cotton compress of A. W. Cooper, New Orleans, La. Loss \$35,000.

The works of the Common Sense Fertilizer Co., Louisville, Ky.; loss \$5,500. Will be rebuilt.

The mill of Bud Hammond, Haywood, Ga.

The gin of George T. Jones, near Fort Valley, Ga.

LOCKWOOD, GREENE & CO. MILL ENGINEERS

Office, 65 Westminster St., Providence, R. I.,

Carefully prepared plans, specifications and estimates furnished for the construction, equipment and organization of new mills and the revision and improvement of old.

B. H. Harrell's saw mill, 14 miles from Hawkinsville, Ga. Loss \$1,000.

The turpentine stills of George E. Dodge, in Pulaski county, Ga. Loss \$2,000.

The saw mill of John Suck, St. Mary's, W. Va.

The saw and flouring mill of John B. Badger, 9 miles from Parkersburg, W. Va. Loss \$3,500.

Mr. Wisenbaker's saw and planing mill near Valdosta, Ga. Will be rebuilt.

Machinery Wanted.

BRISTOL, TENN., May 8, 1886.

Editor Manufacturers' Record:

Can you put me on track of some second-hand slate-working machinery, such as saws, planers and rubbing beds? And if you know of a 25 to 40-horse-power steam engine that can be bought very low, do me the kindness to state to the owner that I want to buy one, spot cash. J. P. RAWLEY.

WARM SPRINGS, MADISON CO., N. C.,

May 10, 1886.

Editor Manufacturers' Record:

There is nearly completed here a large hotel of about 180 rooms, and the celebrated hot baths here are being sunk down to bed rock and properly enclosed. The baths when done will be lined with marble and a handsome bath house built over them. The Southern Improvement Co., who have bought the place and are rebuilding it, propose to put a bridge over the French Board River and build roads and improve the country generally, but not in the line of manufacturing. But they have so much improved the former celebrated Springs here, both in temperature and quantity of water, that they are now equal, if not greatly superior, to the Hot Springs of Arkansas in medical virtues, while in the natural advantages of the country and ease of access, the Springs here are beyond comparison. S. C. OAKMAN.

NEW IBERIA, LA., May 6, 1886.

Editor Manufacturers' Record:

Etie & Spellman are erecting a brick yard. Will employ 15 hands.

J. P. SUBERBIELE.

Big Pipe Works.

CHATTANOOGA, TENN., May 10, 1886.

Editor Manufacturers' Record:

The St. Louis Pipe Co., of St. Louis; Dennis Long & Co., of Louisville, Ky., and the Cincinnati & Newport Iron & Pipe Co., have combined and bought a tract of 15 acres on corporation line of this city for the erection of a large pipe works. Will employ 600 to 1,000 hands. Work is to be begun on buildings this summer.

The Miller Manufacturing Co., Canton, O. are writing us to secure a location for their works. They manufacture steam pumps and roller mills.

B. F. Levering, of Bulkely, Ill., is writing for a location for his factory to make an improved door hinge.

Parties are coming here to organize a bank from Warsaw, N. Y.

SOUTHERN LAND & LOAN CO.

AUGUSTA, GA., May 8, 1886.

Editor Manufacturers' Record:

Articles of incorporation have been asked for the Dartmouth Spinning Co., of Augusta, Ga., with capital of \$100,000 and privilege to increase. This is the same enterprise previously reported as that of Edward H. Coates & Co., of Philadelphia. E. H. C.

\$10,000 Coal Co.

RIPLEY, O. May 10, 1886.

Editor Manufacturers' Record:

The Black Diamond Coal Co., of Knowah county, W. Va., was organized with \$10,000 capital, paid up. C. W. BOYD.

Will Rebuild.

BROWNWOOD, TEX., May 7, 1886.

Editor Manufacturers' Record:

The Brown County Milling Co. will rebuild their flour mill. BROOKE SMITH.

RECTOR, ARK., May 6, 1886.

Editor Manufacturers' Record:

I have sold out my stove factory and expect to start up a heading factory somewhere in this State soon. W. H. LEHMAN.

MINING NOTES.

By T. K. BRUNER, Salisbury, N. C.

THE BRAY MINE.

The Bray Mine, situated in Moore county, has been purchased by Mr. W. A. Tilden, of New York. Mr. Tilden has been engaged in mining operations in that and other counties in this State for a number of years. Preparations are being made for working the newly acquired mine at once.

DUNLAP MINE.

The Dunlap Mine, also in Moore county, on the banks of Bear creek, is a fine property of 500 acres. It has just been purchased by C. C. Wade and W. B. Wright, of Troy, Montgomery county, N. C. It is said to be one of the best properties in that county.

SIXTEEN POUNDS OF GOLD.

The recent clean-up at the Sam Christian Mine, in Montgomery county, has been reduced to reliable figures. The amount taken was 16 pounds of nugget, coarse and float gold. The nuggets were very fine, rough and angular, and made a big show. Sixteen pounds of gold for 27 days' run may be considered fairly paying placer ground.

STEELE MINE.

Business is lively at the Steele, in Montgomery county. The new mill-house has about arrived at completion. It is a 3-story building, and the ores land in the upper story. They have a splendid heavy-weight crusher which prepares the ore for the 20-stamp mill. They use a "Golden Gate Concentrator" for concentrating the sulphurets. The ore is of a complex nature, being pyrite, chalcopryite, and occasional streaks of galenite, all rich in gold. They are working two shafts, one 65 and the other 135 feet deep. The ore body in the bottom of these shafts varies from 6 to 12 feet in width. The stamp mill will be started quite soon, and an increase over the present force employed is contemplated.

THE APALACHIAN MINE,

or better known in Montgomery as Coggins, continues to improve. The mass of ore is homogeneous, though apparently growing richer as depth is attained. The ore is reported to be worth from \$15 to \$20 a ton in pure gold, while the sulphide concentrates run as high as \$500 to the ton. The dumps carry a large number of tons of this ore, and it is being added to constantly. The mine is equipped with hoisting works amply sufficient for the present depth—80 feet. They contemplate putting in a large stamp mill soon. Room will be made for 40, though only 20 will be put in at the start.

THE RUSSELL

is still producing a wealth of glittering treasure, and is paying its English owners regular dividends. Large preparations are being made for an increase of operations.

VEIN MOUNTAIN MINE.

This famous property in McDowell county is still keeping up its producing record. The company have recently acquired some new territory, which makes their property foot up a total of about 6,000 acres. They are sluicing with two large nozzels, saving the pure gold in sluice boxes and concentrating the "grit" to be worked on their

stamp mill. This property adjoins the Marion Bullion Co.'s lands, reported in last week's MANUFACTURERS' RECORD.

These two large and prosperous works in McDowell are beginning to tell. The interest is taking on commendable proportions, yet there is much room before it will attain proportions commensurate with the extent, variety and value of the minerals in that section. It is an encouraging fact that these two were paying, profitable properties. With such odds in favor of the section development must prove more rapid there than in other localities in the State. In the

BRINDLETON DISTRICT

of Burke county, just this side of McDowell, petty placer mining is on the increase. It has been productive in a small way for many years.

Why South Carolina Lags Behind.

The Charleston News and Courier is alarmed at the failure of South Carolina to keep up with the march of industrial progress in the South, and says that "every interest in the State demands that we shall promptly and diligently search out the cause of our halting or retrogression, and remove it at once and finally." That South Carolina is lagging behind at present is only too true. North Carolina at the same time is largely adding to her manufacturing and mining interests. The mining interests of North Carolina are prospering and are steadily growing in extent, a large amount of outside capital finding investment there. This is one line of industrial development that South Carolina does not possess, if we except the phosphate business. While North Carolina is adding to the number of its saw mills and flour mills, and is even preparing to build three new cotton mills, South Carolina is almost standing still in these industries. An examination of our Construction Department each week will show how far South Carolina is falling behind other States in the number of new enterprises established. There are doubtless many reasons that combine to produce this condition of affairs. One of them that we have found from personal observation is the belief on the part of Northern and Western people that the laws are not so well enforced in South as in North Carolina. The numerous murders in one or two counties in South Carolina have given the whole State an undeserved bad reputation. Having spent the winter in the mountains of North Carolina, a section to which many Northern and Western people are going, some seeking health in the dry and bracing climate of that magnificent country, and some looking for openings in mining, manufacturing and farming, the writer could not but be impressed with the fact that North Carolina was regarded much more favorably than South Carolina by Western people, on account of the better reputation of the former State for the enforcement of laws and the protection of life.

Of all the Southern States from Virginia to Alabama, both included, South Carolina, we believe, is the

least known or heard of as a manufacturing or mining State. Virginia has been widely advertised through her enormous mineral wealth, her coal mines and her iron furnaces, and millions of dollars of Northern capital have been invested there during the last five years, while plans are now about consummated for a scheme of industrial development that will surpass in far-reaching importance anything yet done in that State. The gold and mica and iron ore mines of North Carolina have attracted great attention to that State; and then the marvelously grand and beautiful scenery of her mountain section and its health-giving climate have been so widely advertised that thousands of visitors are annually drawn there. Many of them that come only for a short stay are so charmed that they decide to make it their home. Georgia, for some years the most prosperous of the Southern States, was also for a long time the best advertised, and her resources and attractions were more widely known than those of any other State in the South. The wonderful growth of the iron interests of Alabama and Tennessee have made those two States known throughout the business world. That South Carolina is not one of the most progressive of the Southern States is not the fault of the News and Courier. Against the unwise legislative action calculated to prevent the investment of capital there the News and Courier has persistently, but sometimes in vain, labored. Good laws well enforced, making life in every part of the State as safe as elsewhere, and legislative encouragement to outside capital, would doubtless have some effect in helping on the manufacturing interests of South Carolina. Possibly less free-trade talk in that State would also be beneficial. Manufacturers almost without exception are in favor of protection, and as South Carolina is the champion of free-trade, always fighting protection, it is hardly to be expected that manufacturers will regard that State with much favor. They prefer to invest their money where the prevailing sentiment is more in accordance with their own views than in South Carolina; and, however much the people of that State may deplore this, they must admit that under similar circumstances they would do the same.

THE South has made another forward step in the manufacture of steel nails from Southern-made steel. West Virginia has, of course, been engaged in making steel nails, but the central South has only just commenced the business. A few weeks ago we announced the success of steel-making experiments at the South Tredegar Iron Works, of Chattanooga, Tenn., and now we have the pleasure of noting that the nail department of these works has commenced turning out steel nails made from the steel produced in these works. This is destined to have an important influence upon the development of the iron interests of the South.

Sweet's Patent Measuring Machine.

This instrument, designed by Prof. J. E. Sweet, is intended to facilitate and encourage accurate and definite measurement in the machine shop.

A measuring machine for every day use in the machine shop should combine the three qualities of accuracy, convenience and durability. It is claimed that these features are possessed by this instrument to a remarkable degree.

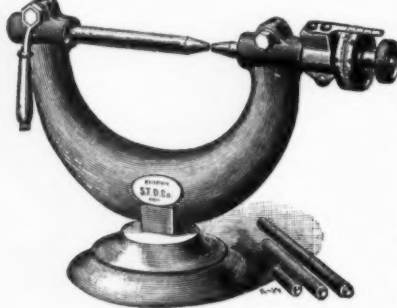


FIG. 1.

First, as to accuracy.—The thread of the screw is of the ratchet form—that is, square upon the back side and beveled in front. (See Fig. 2.) The benefit of this form is that every thread from end to end of the 3-inch nut has a full and square bearing, which does not vary with any slackness of the nut. At the same time, the beveled side of the thread permits any lost motion to be taken up by closing the split nut. In a word, it combines all the advantages of the square and V thread.

Every micrometer screw is liable to vary more or less from the standard, and this

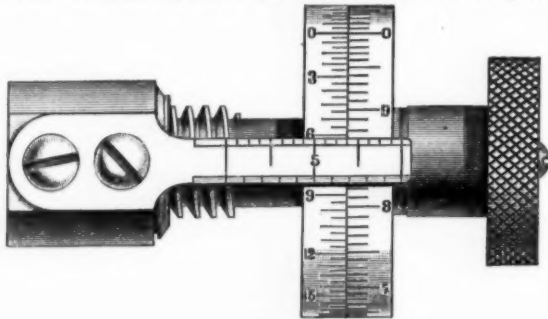


FIG. 2.

variation is compensated and corrected by the adjustment of the index bar, which extends above the graduated discs. The point of this bar is set forward if the thread proves too fine, thus giving somewhat more than the exact number of turns called for by the nominal pitch of the screw. If the thread be coarse, the bar is pointed backward to correspond.

A further contribution to accuracy is found in the friction movement. The screw is turned by a knurled head fitted loosely upon the spindle, but held between two washers, one of felt, the other of steel, the friction being adjusted with any required degree of nicety by means of a screw in the end of the spindle. This device makes it possible for any number of persons to agree in their measurements.

Secondly, as to convenience.—The screw is made of a somewhat coarse pitch, either 10, 16 or 20 threads to the inch. This gives a quick adjustment, while large discs are used to make the graduation distinct and easily read.

All the machines are graduated to read either binary or decimal fractions of an inch without the need of calculation.

Fig. 1 is a perspective view of a 16-thread machine, and Fig. 2 a full-sized view looking down upon the top of the reading portion of the 10-thread machine. A description of this may answer for all.

It will be seen that there are two graduated discs facing each other. The readings are taken at the dividing line. The front (lower) side of the index bar is used in con-

nection with the right-hand disc for decimal fractions. Thus, the reading line is to the right of the 6th mark upon the bar; the nearest figure in front is 8, and there are 2 and say 2 tenths spaces between the figure and the bar. Put these four figures together at the right of the decimal point and we have .6822, the reading to the nearest ten-thousandth without any calculation.

The back (upper) side of the bar and the left hand disc are for binary fractions, the figures indicating 32ds. Fig. 3 shows the somewhat novel arrangement of the figures. By following the straight lines from 0 at the top around by the right the figures will be found in progressive order, and five circuits cover sixteen divisions. This is for the purpose of eliminating the factor five from the ten threads of the screw. The sixteen divisions cover a half inch, or five turns of the screw.

The back side of the index bar, divided into 16ths, is simply used for the purpose of finding the right numbers upon the disc. Thus, in the figure the reading line is very near the 11-16 division. Now as our reading is to begin anew at the half-inch mark, this is 3-16 or 6-32, and as our reading line approaches this point the figure 6 will make its appearance. It is brought to the front edge of the bar to make the reading accurate. The other figures in view upon the disc belong to other turns of the screw.

The measuring screw moves only an inch. The adjustment for whole inches is by means of standard gauges or distance pieces, hardened and accurately ground, and covered with rubber tubing to prevent expansion by the warmth of the hand. These are furnished with the machine. The tail spindle is a plain cylindrical bar clamped in position, and the distance piece required is

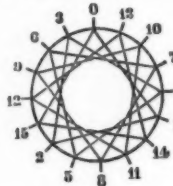


FIG. 3.

the light or the nature of the work may require.

The machine is provided with a box having a false bottom, which forms a base for holding it in an upright position upon the bench for convenience in daily use.

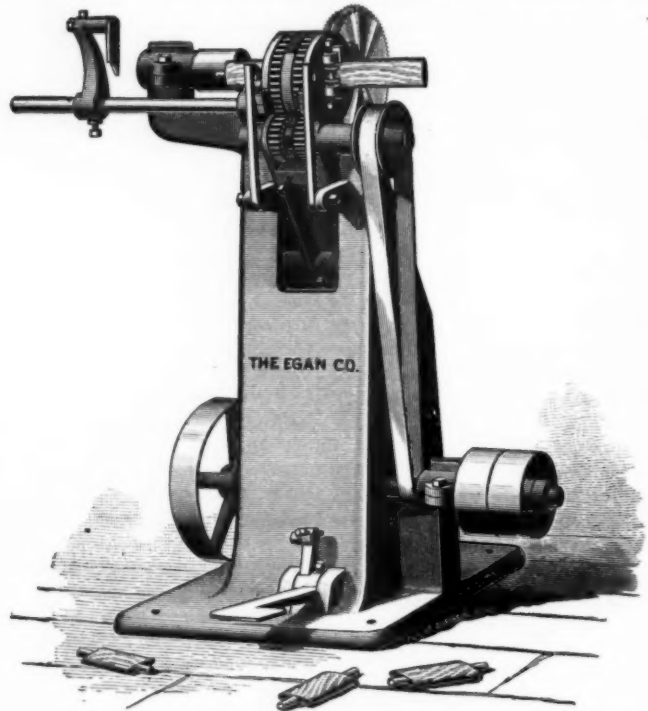
The third quality of durability has not been sufficiently considered in this class of instruments. In this instrument the screw and nut are of the same length, and consequently the whole length of both are being worn together, and the accuracy is always preserved. The only parts of the machine liable to wear are the contact points, and

these are easily refitted when worn out of square.

These instruments, of 4 and 6-inch capacity, are manufactured by the Syracuse Twist Drill Co., of Syracuse, N. Y., who offer to furnish them for trial to any responsible parties.

Blind Slat Tenoner.

The machine shown in accompanying cut is from the shops of the Egan Company, of Cincinnati, Ohio, who claim to have succeeded in making a blind slat tenoner perfect in its construction, accurate in its work, and with superior advantages for changing from one size to another. The frame is a pedestal, well designed, and cored out, making it very stiff and durable. The frame is cut out on one side, so no dust or chips may lodge in it. The patent adjustable jaws can be instantly adjusted on both sides with one screw having a right and left hand thread. This is speed and accuracy combined, as the jaws can be set very quickly and accurately. The treadle is convenient to the operator, and by slightly pressing with the foot brings the head, with its slat, forward. It revolves once and strikes the stop, and makes a complete blind slat tenon on two ends with one revolution. Any length of slat can be cut on this machine from an inch up, and two



NEW BLIND SLAT TENON MACHINE.

ends of the slat at the same time, making two full and complete tenons. The gauge also will admit of any length, and the stops can be instantly changed so as to gauge it accurately. A new feature on this machine is that when the treadle is released from the foot the feed belt is loose, and when the foot is on the treadle the feed belt is tight.

This machine will become popular with planing mills, car shops and other places wanting first-class tenons on their blind slats. For cuts and prices of this or any other improved wood-working machinery, address the manufacturers, the Egan Company, 228 to 248 W. Front street, Cincinnati, Ohio.

WE have received from the Eureka Onyx & Marble Co., of Eureka Springs, Ark., some samples of onyx taken from their mines and polished at their works. They are of great beauty and delicacy, and take a remarkably high polish, showing a very fine grain and a beautiful blending of many colors. It is used for interior decoration, fine furniture work, paper weights, etc.

If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$3.00 a year.

Burls.—How They are Made and Where They Come From.

"Yes," said a manufacturer the other day, "the subject of burls is an interesting one. There, now," pointing to a large, wart-like object, which had grown, in the shape of an excrescence, on an enormous tree in a foreign country, "see that, for instance; it is rather large. It would take an interesting race of giants to have a game of marbles with a few such articles. The burl weighs about a thousand pounds. It is French walnut, from which about 50 per cent. of the veneers used in this country are made. There are also used burls from mahogany, rosewood, maple, ash, cherry, oak and some other varieties. Burls (also called burrs across the water) are not to be confounded with knots. They are an essentially different growth. Their desirability is due, of course, to the peculiar and rich effect of the grain, which is of a character found in nothing but a burl. The term is understood to have originated from the raised points which dot the surface and indicate the tortuous disposition of the wood fibers of the interior, and which are sharper and more pronounced than the bird's-eyes in maple.

The foreign tree is no more valuable for

its lumber than an American tree, but walnut burls do not grow to any extent in this country. Neither do they grow numerous in France, notwithstanding they are called French. The large and valuable walnut burls come chiefly from Persia and Circassia. In the rough they may cost from 15 to 40 cents per pound, and when they come to be worked up they may turn out to be worth three times as much. The actual value is known only when they come to be cut up into veneers, and is dependent upon the soundness of the wood, the character of the grain and freedom from blemish. Before shipping to this country, those who get out the burls often bore into them with an augur to get an idea of their character, and the sheets of veneers are necessarily defaced. The grain usually varies from light to dark, and shows numerous changes as the center is reached. Owing to the value of the material that which is decayed or otherwise imperfect is cut up and the good separated from the bad. The former is utilized for patch-work, and some of the most elegant chamber sets are veneered with a combination of pieces; yet they are so artistically joined that the uninitiated would never detect the splicing and filling. Veneers range in thickness from about one-fortieth to an eighth of an inch, and the average size is

about thirty to the inch. As a novelty, veneers are cut as thin as 160 to an inch."

"How are the veneers made?"

"They are first softened by steam in a sort of a sweat-box, a process requiring from six to thirty-six hours, open-grained woods taking less time than close grained. Then they are cut up by an enormous knife, which is part of a machine made entirely of iron and steel, weighing about thirty-six tons. The wood is bolted to a two-ton stay-log or

filled; is walnut grained; has porcelain casters and bronzed locks and hinges, making it quite a handsome article of furniture.

The Jewett Mfg. Co.'s Sideboard and "Sideboard Grand" Refrigerator, made entirely of hard wood, with or without beveled mirror, and containing a porcelain-lined water-cooler with stand for glass, is a very elegant and convenient affair.

The Jewett Mfg. Co. make several styles of refrigerators for hotels, restaurants and



THE LABRADOR REFRIGERATOR.

beam, and with a downward swing a sheet of veneer, equal to the entire surface of the burl, is sliced off. The oscillating motion of the stay-log is imparted by a driver and crossbar stroke below. A good sized machine will cut stuff up to ten feet in length and thirty-four inches in width. The edge of the knife must be kept like that of a razor, and if dulled by grit it must be immediately sharpened. Such woods as ebony and lignumvitæ are too hard for the knife and must be sawed. There are also machines which revolve a log and cut off continuous sheets of veneering down to the heart of the wood. Some burls are four feet through, and one of them could be sliced up in about an hour into some fifteen hundred sheets. The veneer business flourishes chiefly in the East, but several million feet, surface measure, are annually turned out in Chicago."—American Furniture Worker.

The Labrador Patent Refrigerator.

The illustrations on this page represent the "Labrador" Refrigerator, made by the John C. Jewett Mfg. Co., Buffalo, N. Y., who have been well and favorably known to the trade for more than a third of a century.

In the "Labrador" the ice-box and shelves are removable, securing easy access for cleansing. The four sides of the ice-box are exposed to the air, answering the double purpose of throwing off cold air and condensing the moisture, rendering the air dry and very cold. The cold blast patent consists in the circulation and rotation of air, forcing a constant stream of ice-cold dry air into the provision department. There is a sliding door giving access to the lower section of ice-box, which may be utilized for broken ice which falls down or the ice left over from previous days, and will also be found a convenient place for cooling bottles of mineral water, wine, &c.

The "Labrador" is simple in construction, easy to repair; has thick walls, charcoal

and keeps the temperature at the lowest point possible.

The Jewett Mfg. Co. are also manufacturers of a large line of handsome water-coolers, filters, ice-cream freezers, bird cages, toilet ware, bathing apparatus, and many other useful household articles, illustrated descriptions of which are published in their handsome catalogue for 1886, which will be sent on application.



THE LABRADOR REFRIGERATOR.

Status of Southern Industry.

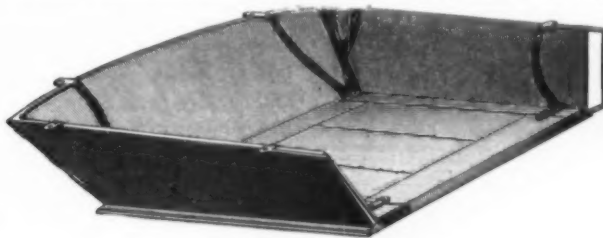
Reviewing the growth of Southern industry for the first quarter of the current year and its present condition, the Baltimore MANUFACTURERS' RECORD remarks that "capitalists from other parts of this country, as well as from Europe, are joining hands with the business men of the Southern States in building new factories, furnaces, etc., in opening mines of coal, iron ore and precious metals, and in constructing railroads." * *

Facts of progress and prosperity apparent on all hands fully justify such observations. The South as a whole has not only safely emerged from the condition of financial and commercial collapse in which the close of the "reconstruction" era left her, but has actually accumulated a considerable available

Atlantic Southern States have entered weightily into the industrial adventures of Tennessee. No doubt a great deal of Eastern and Northern capital can and will find profitable employment in the South, and it is heartily welcome. It is nevertheless a source of much just pride to us that so much of the flattering position this section now occupies in the eyes of the world is the direct result of home effort, energy and enterprise. —New Orleans Times-Democrat.

The Excelsior Seat.

The Excelsior Seat Co., Columbus, Ohio manufacture the widely known seat bearing their name, one style of which is shown in the cut. They make seats of various patterns for buggies, carriages, wagons, drays



THE EXCELSIOR SEAT.

surplus capital which is now being freely invested whenever legitimate enterprise in the section offers the opportunity. This is especially apparent in connection with current industrial movements in Kentucky, Tennessee, Alabama and Louisiana. It is true that a good deal of outside money is now finding its way to help build up the wealth of the South through extended development of our great mineral region, but the aggregate of this sort of capital is small when compared with the amount invested and traded on by Southern men, who have made what they have during the past ten years, and by the hardest work, in the teeth of countless difficulties. For instance, the city of Birmingham has not a baker's dozen of residents engaged in trade or manufactures who are not sons of the South. The people

trucks, &c.; also shifting rails, buggy bodies, lazy back irons, &c. The Excelsior Seat is strongly made of the best material and is very popular among carriage and wagon makers. The manufacturers have an illustrated catalogue of their goods which will be sent on application.

Annual Report of the Iron and Steel Association.

From the annual report of the American Iron and Steel Association for 1885, just issued, we reprint the following summary of the production of iron and steel in the United States last year:

Production of pig iron in 1885, net tons...	4,500,869
Production of spiegeleisen in 1885, included in pig iron, net tons.....	34,761
Production of bar, rod, hoop, skelp and shaped iron in 1885, net tons.....	1,800,958
Production of plate and sheet iron, except nail plate, in 1885, net tons.....	345,069
Production of iron and steel cut nails and spikes in 1885, kegs of 100 pounds.....	6,696,815
Production of steel or combined iron and steel nails in 1885, kegs of 100 pounds...	1,823,127
Production of all rolled iron, including iron nails and excluding rails, in 1885, net tons.....	1,789,711
Production of Bessemer steel rails in 1885, net tons.....	1,074,607
Production of open-hearth steel rails in 1885, net tons.....	4,793
Production of iron rails in 1885, net tons...	14,815
Total production of rails in 1885, net tons...	1,094,215
Production of iron and steel street rails in 1885, included above, net tons.....	35,990
Production of Bessemer steel ingots in 1885, net tons.....	1,701,762
Production of open-hearth steel ingots in 1885, net tons.....	149,381
Production of crucible steel ingots in 1885, net tons.....	64,511
Production of blister and "patented" steel in 1885, net tons.....	1,696
Production of all kinds of steel in 1885, net tons.....	1,917,350
Production of iron blooms in 1885, net tons.....	41,700
Value of imports of iron and steel in 1885...	\$31,945,893
Value of exports of iron and steel in 1885...	\$16,630,780
Imports of iron ore in 1885, gross tons....	390,786
Production of iron ore in the Lake Superior region in 1885, gross tons.....	2,448,443
Production of iron ore in New Jersey in 1885, gross tons.....	330,000
Domestic iron ore consumed in 1885, gross tons.....	7,600,000
Production of anthracite coal in 1885, gross tons.....	31,683,589
Total production of coal in 1885, gross tons.....	102,224,553
Miles of railway completed in 1885.....	3,000
Total number of miles of railway December 31, 1885.....	128,279
Iron and steel ships built in the fiscal year 1885.....	48

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the BALTIMORE MANUFACTURERS' RECORD.

Discussing Strikes.

The Baltimore Board of Trade, at its meeting last Monday, discussed the labor question. Mr. Frank Frick said: "If, in the nature of events, labor organizations must exist," he continued, "then be it so, but it is not for us to pronounce upon the wisdom of such combinations in the face of the ruin and disorder that are spreading over the country. Capital may as well claim that it receives no adequate return from labor, and justifies schemes of extortion in rates of interest and corners to force the price of food beyond the reach of the poor. If such unions were confined to special trades, for the discussion of particular interests, questions of comparative remuneration, matters appertaining to their individual occupations and welfare, economy and savings banks, the advancement of social and religious life—then they might claim the character of wisdom. But experience shows that such is neither the object nor the conclusion. Trades unions are organized for power and as the means of securing higher wages. When the demand fails strikes are ordered, and coercion and violence follow as inevitable consequences. And so invidious are the measures employed that it is impossible to define where the line of justice ceases and where horrors of socialism begin. It is useless to blind ourselves to the fact that the haunts of the strikers are the lurking-places of socialism, used as a cover for their nefarious designs, and beyond the reach of penalty. There is no power under our government that can suspend the traffic of the country; and yet, with a single word, a leader of the Knights of Labor can bring the industrial machinery of the country to a halt. It is needless to urge that there are two sides to the question. Every one who has feelings of humanity in his heart sympathizes with the laboring class. Every one knows there is oppression such as is sometimes painful to contemplate. But the remedy lies beyond our philosophy, and, so far, beyond the reach of the philanthropist."

Mr. David L. Bartlett, of Bartlett, Hayward & Co., said there was a misunderstanding about the labor organizations. The Knights have for their chief object the prevention of strikes under the laws governing them; arbitration and argument were first to be exhausted before a strike could be ordered. He had advised men in his employ to join the Knights, and it had been through their influence that a threatened strike was prevented. The trouble was gotten over by a proper understanding of the difficulty.

Mr. Germon H. Hunt, of Poole & Hunt, endorsed all that Mr. Bartlett had said. He at first was prejudiced against the organization of the Knights, but, finding upon close examination of its laws its objects were good, he approved of them, and for the reason they were intended to prevent and were opposed to strikes, only ordering them after all other efforts had failed. He said some of the ablest men of our country were identified with the great labor organization, and though there was much disorder now, which was apparently epidemic throughout the country, good would ultimately result. He thought the violence experienced in Chicago and other Western cities, which is to be deplored and deprecated by every right-minded man, is also condemned by the Knights in their organization, whose greatest trouble is that the accessions to it have been so great as to require additional laws to curb them. The trouble was now rapidly correcting itself.

In a letter from Norfolk, Va., in our issue of May 1, it was stated that the powerful cotton compress operated by the National Compress Association put a pressure of 35,000 pounds on the bales. This should have been 3,500 tons.

THE Manganese & Iron Co. of Baltimore City have sunk three shafts on their property at Mine Run Furnace, Shenandoah county, Virginia, and are working day and night. The ore is pronounced by experts to be of the highest grade and in inexhaustible quantity. This company has infused new life in that section of Virginia.

ASHEVILLE, WESTERN NORTH CAROLINA, for Tourist and Health Seeker, by Hinton A. Helper, (price 25 cents,) is the title of an interesting and instructive pamphlet regarding one of the most attractive sections of the United States. Asheville is a beautiful city, having a splendid location for health, pleasure and business, and as the most important place in the Western North Carolina mountains, is attracting much attention in Europe as well as in America. The magnificent scenery of Western Carolina and the remarkable healthfulness of the climate commend that section to the invalid and to the tourist, and to both of these classes Mr. Helper's book will be of value. Mr. Helper has established at Asheville a Bureau of Information for all who desire to learn of the resources and attractions of Western North Carolina, making no charge for the information furnished.

W. E. BARNES, the editor of the St. Louis Age of Steel, has in press by Messrs. Harper Bros. for early publication a book entitled "The Labor Problem; Plain Questions and Practical Answers," in which the labor question is discussed by Mr. Barnes, Prof. Ely, of the Johns Hopkins University, Mr. Fred. Woodrow and others.

THE Enquirer-Sun, of Columbus, Ga., appears in new type, giving evidence of its prosperity. The Enquirer-Sun is a handsome 8-page paper that reflects credit upon the city of Columbus. It is enterprising and reliable, and well deserves the success which it has achieved.

COMMENTING upon our statistics of Southern progress, the Charleston News and Courier says:

The other evidences of progress which are cited to support these observations are numerous and full of encouragement to the sections where they are found; as they are full of warning to the sections which are slower to catch step in the grand march, or through ignorance, indifference or prejudice continue to throw obstacles in their own way. The prolonged labor agitation in the North and West has a direct tendency to divert capital to the South, where the industrial conditions are scarcely influenced by the storm that is raging around its borders, and nothing but the extension of the agitation to the more favored States, or a blind policy of unfriendliness on the part of our own people to the investment of capital from without, can prevent us from experiencing the full benefits of the movement of money in our direction.


Nor is this all. The capitalists resident in any State will not turn their money into the channels of investment that may be open around them so long as they detect in the

legislation of the State, or in the sentiments of the people, any evidence of a disposition to antagonize in any way the interests of men who have money to lend or to invest. The vinegar policy catches no timid silver or gold fly, and the community which has no use for manufactories or improvements of any kind except to tax them, will find that America is a broad and goodly land; that foreign capital is slow to invade a hostile State so long as there is room left to be occupied in more friendly, even if less favored localities; and that even home capital will hide in vaults unless tempted and encouraged to embark in new enterprises. In illustration of this point the New Orleans Times-Democrat states, with regard to current industrial movements in Kentucky, Tennessee, Alabama and Louisiana, that while it is true that a good deal of outside money is now finding its way to help to build up those States, "the aggregate of this sort of capital is small when compared with the amount invested and traded in by Southern men, who have made what they have, during the past ten years, by the hardest work and in the teeth of countless difficulties."

THE New York Time Table is an interesting paper. Unlike other papers of similar character it does not confine itself to publishing schedules of the arrival and departure of trains, but in addition it contains several pages of reading matter interesting to the general public and to railroad people in particular. Its editorials in support of the rights of railroads are sound and readable. The Time Table is edited by Mr. W. B. Hopson, at 81 and 83 Elm street, New York.

CORRESPONDENCE relating to the manufacturing, mining, lumbering and all other material interests of the Southern States is solicited. Reaching so many capitalists in all parts of the United States seeking profitable investment in the South, the MANUFACTURERS' RECORD offers an excellent chance for the people in that section to place the advantages of each locality before those likely to be interested. We will take great pleasure at all times in telling what has already been accomplished in the South, and showing up the opportunities of doing still more.

BEAUDRY'S UPRIGHT CUSHIONED Power Hammer,
BY FAR THE BEST!
Blow accurate, powerful and elastic. Will increase the profits of any shop.
70 Kilby St., BOSTON, MASS.
Beaudry & Cunningham.



ALWAYS ASK FOR
ESTERBROOK'S
CELEBRATED
STEEL PENS.

PENS

LEADING NUMBERS:
048, 14, 130, 333, 135, 161
For Sale by all Stationers.
The Esterbrook Steel Pen Co.
26 John Street, New York

Derby Roll Top AND Flat Top Desks



The BEST and CONSEQUENTLY the CHEAPEST OFFICE DESK IN THE WORLD.

Derby & Kilmer Desk Co.,
Manufacturers.

OFFICE AND WAREHOUSES:
55 to 65 Charlestown St.,
BOSTON, MASS.

Illustrated Catalogue on Application

Manganese for Sale.

The owner of a **Valuable and Extensive Deposit of Manganese Ore**, desires the co-operation of individuals or a company to operate the same.

Openings have been made, and large quantities of ore found, which plainly show that two large veins or deposits extend through the property.

Quantity unlimited, accessible to market at a large profit.

Analysis shows Bix Oxide over 90 per cent., Metallic 57 per cent.

For full particulars, address,

H. P. O. Box 186, Baltimore, Md.

WANTED: A PARTNER In a Hardware Store

With about \$3,000, situated in a growing and healthy town in Virginia.

ADDRESS P. O. BOX 96,
Baltimore, Md.

FOR SALE.

Complete system Cotton Mill Machinery of 5,000 spindles almost as good as new; has been run only about three years. Prices and terms satisfactory; part payable in bonds of a good company. The advertiser can secure contracts for its entire production at remunerative prices for one year ahead.

Address **O. M. HARPER,**
Care J. H. Lane & Co.,
No. 110 Worth St., New York.

A Rare Opportunity.

WANTED—A good man with \$2,000 to take half interest in an established wholesale and retail hardware business in one of the most progressive manufacturing towns in Virginia. Only 2 stores in town of 8,000 people. Address **LEVEL,** care MANUFACTURERS' RECORD.

FOR LEASE.

The Lexington Manufacturing Company, of Lexington, Va., wishes to lease for a term of years its Foundry, Boiler and Machine Shops, fronting 200 feet on side tracks of B. & O. and R. & A. Railroads. These shops are thoroughly equipped with ample (water) power, and are ready for occupancy and use without the expenditure of a dollar. It is a fine opportunity for capitalists who wish to engage in any character of iron manufacturing in the heart of the iron region of the James River Valley, of Virginia. Address

THE LEXINGTON MANUFACTURING CO.
Lexington, Rockbridge Co., Va.

ARCTIC ICE MACHINE MFG. CO.

Works, 4, 6, 8 & 10 West Street, Cleveland, O.

Manufacturers of Machines for Making Ice and for Refrigerating Breweries, Pork Houses and buildings of all kinds requiring a steady, low temperature. Over 100 of our machines now in use. Send for any particulars desired. P. O. Box 92, Cleveland, Ohio, or P. O. Box 348 Cincinnati, Ohio.

COMMON SENSE ENGINES.




Simple, durable, economical, perfect, fully guaranteed. All wrought iron. Agents wanted everywhere.

From 3 to 10 Horse power. Boiler wrought iron.

Best CORN MILL in the World for plantation and farm purposes.

Stationary Engines from 6 to 100 Horse Power. Portables from 6 to 25 H. P.

COMMON SENSE ENGINE CO.,
Springfield, Ohio.

LEADING NUMBERS:
048, 14, 130, 333, 135, 161
For Sale by all Stationers.
The Esterbrook Steel Pen Co.
26 John Street, New York

Business Chances.

For the purpose of making the **MANUFACTURERS' RECORD** a still more valuable medium of communication between its readers North and South, we will publish, **FREE OF CHARGE**, short advertisements, not exceeding 40 words, from those in the South who have good business openings that they wish to bring to public notice, capital wanted for industrial enterprises, &c., &c.; while readers in other sections who desire to engage in manufactures at the South are also invited to use these columns, without cost, either in seeking information regarding the advantages and special claims of different localities, or for asking about good openings for men and money. This department is also free for Southern manufacturers who wish to advertise for mill managers, superintendents, engineers, &c.

In corresponding with any of these advertisers please mention the **Baltimore Manufacturers' Record**.

Parties advertising in this column must have replies sent to their own address, and not to care of Manufacturers' Record, unless stamps are sent for forwarding replies. Advertisements sent not in accordance with this requirement will not be inserted.

WANTED—To open correspondence with capitalists in reference to the building of an important railroad link of 25 miles between two "Trunk Lines," and the development of the finest yellow pine timber and the largest and most valuable cypress swamp timber in the South, 40,000 acres of which are under contract. The charter and all rights of way secured and five miles of road bed finished, crossing the only two streams on the line. A rare opportunity is offered to those desiring to engage extensively in the lumber trade. We invite correspondence and a personal investigation of the scheme. Address P. O. Box 67, Sumter, S. C.

WANTED—A set of good woolen machinery, or a one-set woolen mill in a good location, in exchange for 800 acres of good land. Any one who may have the above will do well to correspond with the undersigned, giving description of machinery, etc. Address, J. T., Olympia, Smyth county, Va.

FOR SALE—An established business and a splendidly built two-story brick building erected expressly for it. Fine opening for a man of small means, who wants to engage in the manufacturing, repairing and selling of buggies, wagons, plows, etc. Reason for selling: Desire to engage exclusively in the manufacture of farm wagons for the wholesale trade. Apply or write to Owensboro Wagon Manufacturing Co., Owensboro, Ky.

VALUABLE LAND FOR SALE—470 acres. About 140 acres open in fair state of cultivation; is level; good neighborhood; 2 miles from railroad depots, churches and schools; perfectly healthy; title good; also 1230 acres in wood and 240 acres in another tract; a part cleared; all near railroad. For further particulars address, P. O. Box 27, Rockingham, Richmond county, N. C.

WANTED—Pattern Maker and Draftsman, with two or three thousand dollars, to take an interest in an established engine, saw mill and boiler works, to work under salary. The entire plant is new; equipped with the best tools; has been in operation two years. Books will show a dividend of 55 per cent. Located in a fine Southern city of ten thousand inhabitants, has the best of prospects for future business. Machine shop, foundry and boiler shop operated by practical men, who are stockholders and all workers. Reference required and given. For further particulars address N. S., care of Baltimore Manufacturers' Record, Baltimore, Md.

WANTED—A partner who is skilled in the manufacture of cedar in its various forms. Send estimate of cost of necessary machinery to be run by water. Address, James U. Vincent, Glen Rose, Texas.

A PRACTICAL MAN has money to invest along with some local capital in building and operating an ice factory in any good locality in the South. Would like to receive information as to places where there is an opening. Address, Bristol, care Manufacturers' Record.

SITUATION wanted by a practical machinist, engineer, sawyer and saw filer. Address, J. B. Thomas, Melson, Ga.

IRON FURNACE FOR SALE—One of the most desirable charcoal furnaces in Virginia, located in Wythe county, will be sold on liberal terms; abundance of fine ores, water and timber. Address J. A. Walker, Wytheville, Va.

WANTED—A purchaser for fine grass and fruit farm in the most beautiful and fertile portion of the "French Broad" valley, Transylvania county, half mile from town of Brevard, N. C. Climate unexcelled; mountain scenery grand; good frame dwelling and necessary outbuildings; orchard contains 2,000 apple trees and other fruits. Address S. E. Lucas, Brevard, N. C.

WANTED—A competent machinist who is qualified to conduct a foundry and machine shop, and comes well recommended, can purchase an interest in a well-established business at a bargain and secure constant employment. For particulars address F. B. Alexander, Hickory, N. C.

WANTED—An experienced man, with some capital, to operate an established foundry and machine shop that has done a prosperous business. The present proprietor is too old to manage it as desired. Address J. A. Smith, Gulf, care of J. T. Patrick, Raleigh, N. C.

WANTED—To sell an old-established, prosperous, Democratic newspaper and printing business, in a beautiful and growing county-seat and railroad town of Texas, not very far from Austin; official paper of city and county. Address Editor, care Manufacturers' Record.

WANTED—To correspond with capitalists in reference to the building of an important railroad link of 20 miles, uniting two main trunk lines and developing valuable resources. Eight miles already graded. Piers and abutments built across a river. Charter and right of way will be transferred free to party or company who will complete the connection. Address A. F. Naff, Greenville, Tenn.

WANTED—A Partner with some capital to engage in the shoe business in Raleigh, N. C. Present proprietors desirous of enlarging their operations. They have control of the State convicts, which can be used to advantage in manufacturing shoes. Address, Shoe Manufacturer, care of J. T. Patrick, Raleigh, N. C.

WANTED—Capital to invest in a hotel, where a guarantee of 10 per cent. will be given for five or ten years on money invested. Address J. T. Patrick, Commissioner Immigration, Raleigh, N. C.

WANTED—A practical man with \$500 to \$1,000, to take half interest in an established wagon and plow manufacturing establishment in a thriving village of North Carolina—a railroad center. Address Wagon and Plow, care J. T. Patrick, Commissioner Immigration, Raleigh, N. C.

WANTED—A partner to engage in the mercantile and manufacturing business; the mercantile department has already been established; manufacture of tobacco desired; not a factory in the county; large amount of tobacco raised; splendid opening for a factory on a small scale; will require about \$2,000 to take half interest; house rent only \$60 per year—two-story house; top of building can be used for a tobacco factory; railroad will soon run to town; grading already done and cross-ties ready to be put down. Address for information E. L. Hendericks, Taylorsville, care of J. T. Patrick, Raleigh, N. C.

WANTED—A partner with \$2,000 capital in a handle factory, now established with good trade; has a good water power. Timber very cheap and location good. Address G. W. Simpson, Salisbury Furnace, Botetourt county, Va.

CAPTAIN J. J. FARR and other citizens of Glen Rose, Texas, will offer great inducements to a live, thorough, progressive educator, who will establish and conduct a high grade institution at that place.

A GOOD CHANCE FOR INVESTMENT—A daily and weekly newspaper in one of the most progressive manufacturing towns in the "New South" is offered for sale at a bargain. An excellent chance for the right man to make money. Very little capital required. Satisfactory reasons given for wanting to sell. Apply to Milton A. Smith, Anniston, Ala.

WANTED—A partner, with capital from eight to twelve thousand dollars, to take half interest in a wool manufacturing establishment, water power so-horse strong, in a healthy and desirable location in North Carolina—the Piedmont section. For further information address Thos. Parker, Waco, care of J. T. Patrick, Raleigh, N. C.

A SKILLED Manufacturer of boots and shoes and of saddles and harness, can learn of a good opening by addressing William Allen, Glen Rose, Texas.

THE Talladega Oil Mill & Public Ginnery is offered for sale, or would form a stock company for manufacture of fertilizers and soap. Correspondence solicited. W. E. Yancey, Talladega, Ala.

VALUABLE COAL PROPERTY FOR LEASE in Montgomery county, Va., two miles from railroad. Address Chas. C. Kasey, New River Depot, Va.

WANTED—A reliable man with \$1,500 cash, to engage in a lucrative business, in a great business center in the South. Address Energy, care of Manufacturers' Record, Baltimore.

Mr. MART MARTIN and other responsible citizens of Glen Rose, Texas, will form a partnership with an experienced distiller for the purpose of running a United States distillery in Somerville county.

WANTED—A partner in an established and paying planing mill, sash, door and blind factory, in a central and thriving city. Address Goldsboro Rice and Planing Mill, care of J. T. Patrick, Raleigh, N. C.

FOR SALE—1 Ring Twister, 8 Patent Twisters with spools, shafting, pulleys and belting, for making patent seine twine from 9 to 36 thread. Part of the machinery run less than two months. Will be sold for half its value. Address, Gillette Twine Co., Mount Verd, Tenn.

WANTED—To sell a newspaper outfit very cheap. Also want to know of some locality desiring a weekly newspaper. Address, E. S. J., P. O. Box 91, Pulaski, Tenn.

WANTED—A party with small amount of capital to join in starting manufactory of knit goods with Lamb or some other good, low-priced knitting machine. To the right party understanding the business a location will be furnished; also a nice building lot for a home given. Address A. F. Naff, Greenville, Tenn.

WANTED—A practical experienced man to engage in some manufacturing enterprise that he may suggest, such as foundry and machine shop, brick tile manufacturing, or any paying enterprise. The location and some capital will be furnished to experienced man with capital. For information address J. M. Haden, Salisbury, care of J. T. Patrick, Raleigh, N. C.

FOR SALE—One-fourth or entire interest in a pottery on the line of the C. & A. R. R., near Aiken, S. C. Eleven hundred acres in tract, unfailing stream of water, inexhaustible supply and great variety of the finest clays (Kaolin). Plant complete and investment paying; more money needed to increase output to meet orders. Opportunity of investment to practical potter or one understanding the business unsurpassed. Address James G. Holmes, 60 Buchanan's Wharf, Baltimore, Md.

WANTED—Parties seeking oyster farms, early fruit or truck farms, for canning or other purposes, or those looking for any kind of business investment in Maryland, Virginia, Georgia or Florida, to address I. D. Barton, 4 Courtland st., Baltimore, Md.

Get the Best at First.

The Holyoke Machine Company, of Worcester, Massachusetts, advertise in this issue their well-known Hercules Water Wheel. This wheel has many points of merit that strongly commend it to the attention of those who use water power. The most thorough tests have demonstrated its many good qualities. In Holyoke it is the standard water wheel, the aggregate horse power of the Hercules wheels in operation there being greater than that of all other wheels combined. These wheels are very popular in the South as well as in the North, having been in use for many years in a large number of Southern mills. There are four of the Hercules wheels now in operation in the big cotton mills of the Eagle & Phenix Manufacturing Co., Columbus, Ga., and Mr. John Hill, of that company, in writing, Feb. 25, 1885, to the Holyoke Machine Co., said: "Within the past four years I have ordered four Hercules wheels, all of which have given the purchasers entire satisfaction. Three of the wheels are on regular duty in the Eagle & Phenix Mills. The first wheel ordered did so well that a 'Hercules' wheel has been added each time a new wheel was wanted. In the Eagle & Phenix Mills I supervise twenty water wheels of six different styles. The 'Hercules' is by far the most durable and best made wheel in use here, and, in fact, I know of no wheel its equal mechanically. It is all that can be desired in economy of water. In fact, it is a strictly first-class wheel in every way, and the wheel to buy, use and depend upon."

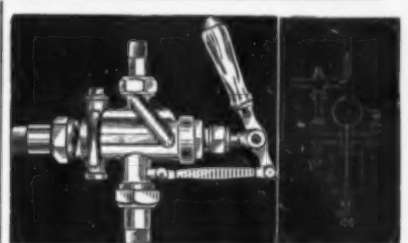
That is a pretty strong letter, but it is only a sample of letters received by the manufacturers of this wheel. Among the recent shipment of wheels have been two—one a 34-inch and one of 60-inch—to a Georgia cotton mill. Two Hercules wheels are being put in at Natick Cotton Mill, and one at the Arctic Mill of B. B. & R. Knight near Providence. This will make eleven wheels furnished to this well-known firm, one of the most prominent in the manufacturing line in New England. Hercules wheels are sold in England, Ireland and Scotland, and on the Continent, a cable order having been received only a few days ago for one to go to France. The manufacturers say: "The Hercules gives the most power for its size and the highest average percentage from full to one-half gate of any wheel ever made." Their advice to all users of water wheels is to "get the best at first." If you are interested in water wheels, if you want a new wheel or a larger wheel, or a better wheel than you are using, write to the Holyoke Machine Co., Worcester, Mass., for catalogue No. 3.

Established 1867.
E. Harrington, Son & Co.
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PATENT EXTENSION and
SCREW-CUTTING
LATHES,
Iron Planers,
Radial, Upright, Suspension,
Multiple and Lever
DRILLS,
and a variety of other
MACHINISTS' TOOLS
Patent
Double Chain Screw
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UNRIVALED FOR DURABILITY,
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Quick-Life Hoists,
with brake, for quick and easy
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24 in. x 24 in. x 6 ft. Planer, Powell.
24 in. x 27 in. x 7 ft. Planer, Ames.
26 in. x 26 in. x 6 ft. Planer, Powell.
26 in. x 26 in. x 6 ft. Planer, Putnam.
30 in. x 30 in. x 10 ft. Planer, National.
20 in. Swing Drill, Prentice.
25 in. Swing Drill, Blaisdell.
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3 and 4 Spindle Drill, Garvin.
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2½ in. Cutting-off Machine, Pratt & Whitney.
No. 2—3½—4 Stiles Punch Presses.
Also a line of New Tools all kinds. We are always glad to correspond, and if parties desiring to purchase will write, stating just what they want, we will be glad to name prices on either new or second hand.

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No. 14 Dey Street, New York.



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RICHMOND, INDIANA.

The Hardware Trade Should Sell the

\$5 Ligowsky-Mueller Trap No. 7
x with "TEIPEL ARM" for
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Ligowsky
"Clay
Pigeons,
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LIGOWSKY
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The only combined High and Low Water Alarms in Existence. Marvelously simple, and simply perfect. Obviate explosions, burning of flues, overflows, etc. A low gauge of water can be run with perfect safety, thereby securing better steam and saving fuel. Chamber at bottom catches all sediment. Nothing to get out of order. Never fails to give alarm. Send for illustrated price list.
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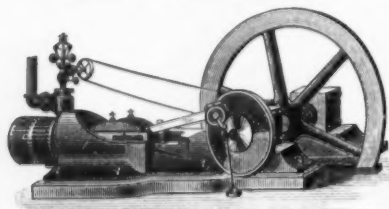
Economy of Fuel, with increased capacity of Steam Power. Like the **Siemens Process of Making Steel**, it utilizes the waste gases with hot air on top of the fire. Will burn all kinds of waste fuel without a blast, including Slack Coal, Sawdust, Logwood Chips, &c. Send for Circulars.

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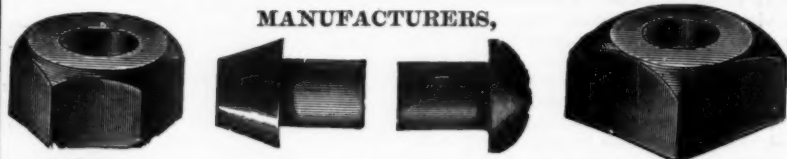
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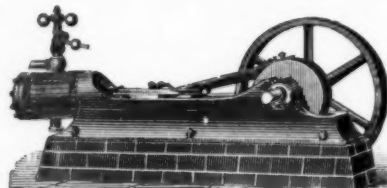
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Successors to D. GILES & CO., Chattanooga, Tenn., Manufacturers of



Also Castings and Pat-
terns of Every Descrip-
tion made to order.

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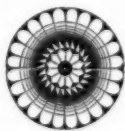
A Good Water Wheel Increases
the Value of Your
Whole Plant.

GET THE BEST AT FIRST AND AVOID THE
EXPENSE AND DELAY OF CHANGING
THE WHEELS.

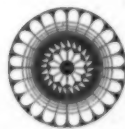
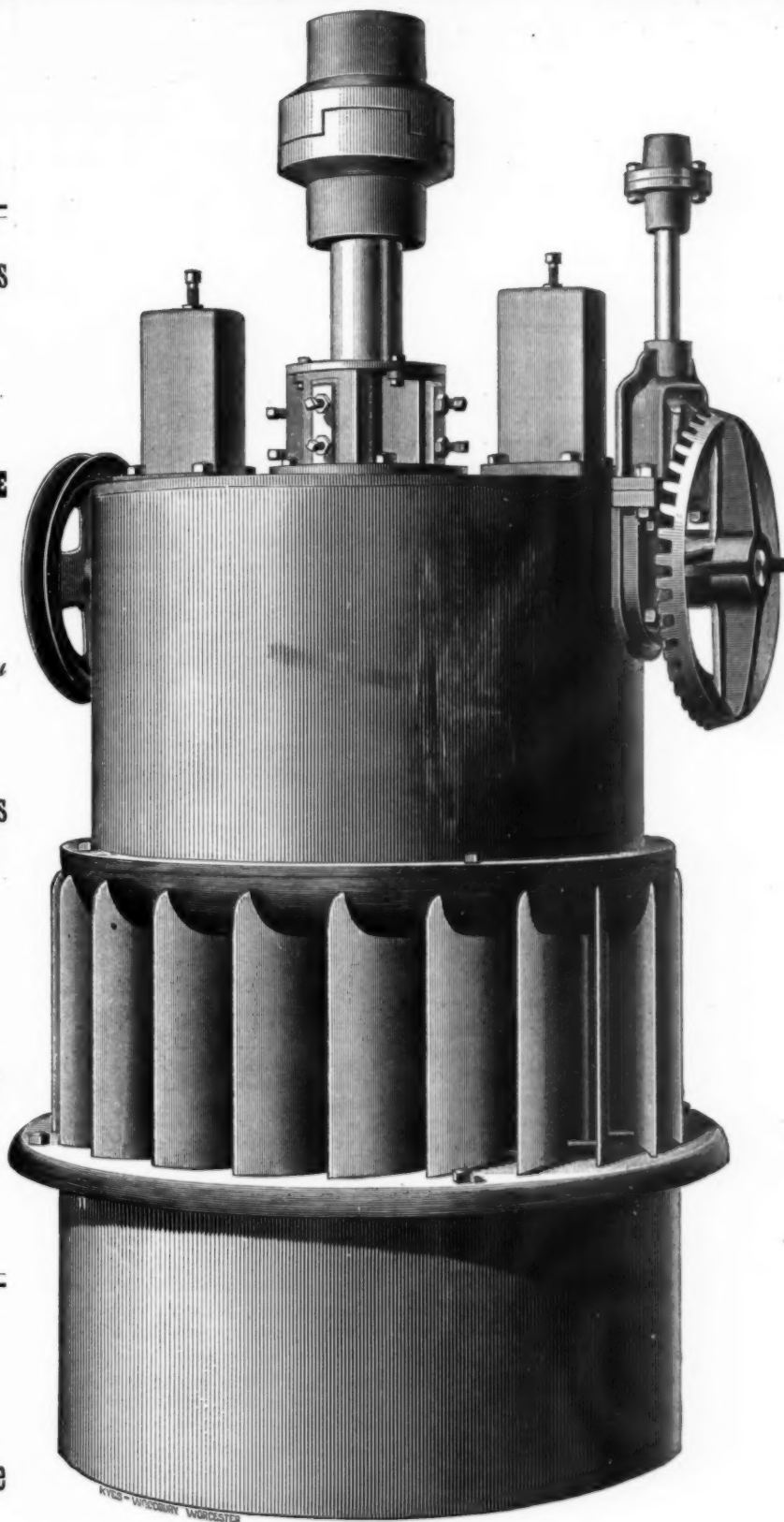
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THE BEST IS THE CHEAPEST. IT DOES
MORE WORK, LASTS LONGER, AND
COSTS NO MORE FOR GEARS
AND SETTING THAN A
COMMON WHEEL.

The Hercules Gives the Most Power for its Size
and the Highest Average Percentage
from Full to One-Half Gate of
any Wheel Ever Made.



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When it is considered that
the HOLYOKE WATER
POWER COMPANY test
every wheel that is put in in
Holyoke, and use the wheels
as a guage or meter for mea-
suring the water to the
manufacturers and charge
them for the actual quantity
of water used, it will be seen
that the HERCULES stands
first in the estimation of
Holyoke manufacturers as an
economical wheel in the use
of water for the amount of
power produced. The HER-
CULES, we believe, is the
only wheel of which all the
sizes, both right and left hand,
have been tested, some of
them many times, and all
brought to the standard of
excellence which has been
set by the makers and de-
manded by their customers.



Mills in Holyoke, Mass., using

THE HERCULES WATER WHEELS

THE HEAD OF WATER ON THE WHEELS AND THE POWER FURNISHED BY THE HOLYOKE WATER POWER CO.:

	Diam. in inches.	Head on Wheels.	Horse Power.	Date of Setting.		Diam. in inches.	Head on Wheels.	Horse Power.	Date of Setting.		Diam. in inches.	Head on Wheels.	Horse Power.	Date of Setting.
Albion Paper Company.....	39	25	255	1878	Geo. R. Dickinson Paper Company...	36	19	170	1883	The Massasoit Paper Company.....	39	19	197	1883
Albion Paper Company.....	24	25	115	1883	Holyoke Water Power Company.....	30	19	115	1882	Union Paper Company.....	43	20	285	1882
Albion Paper Company.....	45	27	445	1880	Holyoke Warp Company.....	48	11	130	1879	Union Paper Company.....	30	20	125	1882
Albion Paper Company.....	30	27	200	1883	Massachusetts Screw Company.....	27	19	90	1882	Valley Paper Company.....	42	27	390	1882
Chemical Paper Company.....	4-30	23	690	1880	Merrick Thread Company.....	48	12	150	1880	Wauregan Paper Company.....	42	18	210	1879
Chemical Paper Company.....	5-18	23	275	1880	Newton Paper Company.....	48	21	350	1880	Wauregan Paper Company.....	33	18	130	1882
Chemical Paper Company.....	33	23	185	1880	Nonotuck Paper Company.....	48	29	370	1881	Whiting Paper Company.....	27	18	85	1882
Chemical Paper Company.....	42	23	305	1880	Nonotuck Paper Company.....	27	29	175	1881	Whiting Paper Company.....	16	15	30	1880
Chemical Paper Company.....	2-48	23	800	1880	Riverside Paper Company.....	48	20	325	1880	Winona Paper Company.....	48	28	540	1880
Connecticut River Pulp Company....	36	18	155	1881	Syms & Dudley Paper Company.....	45	29	495	1881	Winona Paper Company.....	24	28	135	1880
Crocker Paper Company.....	30	25	300	1883	Syms & Dudley Paper Company.....	24	29	140	1881					
Farr Alpaca Company.....	48	19	300	1878	Springfield Blanket Company.....	36	18	155	1877					
Franklin Paper Company.....	39	20	215	1883	The Beebe & Holbrook Paper Co....	24	19	75	1884					
Geo. R. Dickinson Paper Company...	2-45	19	530	1883										
														9,797
														779
														10,576

Send for
Catalogue
No. 3.

HOLYOKE MACHINE COMPANY, Worcester, Mass.

HARDWARE.

The author of this novel spent several years among the people whom he describes, and it is stated that nearly all of the incidents in the narrative are founded on facts. In the shape of a highly interesting novel he has given us much information on the religion and customs and manners of this strange people, who believe themselves to be the children of Israel. The book is well worth reading.

There have been no material changes during the past week, and notwithstanding the widespread effects of the present labor strike, the volume of trade continues fair. More builders' hardware is selling than one not immediately connected with the business would imagine, and were the labor question satisfactorily settled, with the present excellent crop prospects of all kinds, trade would necessarily feel a decided impetus and values would correspondingly appreciate. We may look for a good fall trade.

Philadelphia Iron Market.

IN Cassell's popular National Library Series the next issues will be Scott's "The Lady of the Lake," Luther's "Table Talk," and Bacon's "Wisdom of the Ancients."

THE MARKETS.

The labor question is still the theme of discussion, and the uncertainty regarding that naturally causes some uneasiness in business circles. The demands of the laborers have been so exorbitant and their actions, in many instances, so unlawful that there is certain to be a reaction against them. The right of every man to refuse to work is freely admitted, but when those who are unwilling to work attempt by force to prevent others from doing so, or by such a conspiracy as the "boycott" to destroy another's business, then it is time for the power of the law to be felt. Nominally this is a free country, but the laborers, or rather a small part of them are trying to introduce the most tyrannical and despotic methods ever known in this or any other civilized country. In this they are hurting themselves even more than they are hurting capitalists; the latter can afford to shut down their business awhile, much better than the laborer can afford to lose his pay. The strikes have already caused an enormous loss to the country; they have, moreover, prostrated for a year, at least, hundreds of enterprises that would have been consummated this summer, and thus prevented the continuance of the activity that prevailed a few months ago. It is hoped that the worst is over, and that in a short time business will resume its normal condition.

Ref. Bar Iron, 1 to 6x½ to 1.....	“ D.	1.85	2	c
“ “ 1 to 4x½ to 1.....	“	1.85	2	c
“ “ ¾ to 3, round and	“	1.85	2	c
square.....	“	2.00	2	c
Hoop Iron, 1½ wide and under.....	“	2.30	2	c
Band Iron, from 1½ to 6 in. wide...	“	3.30	2	c
Horseshoe Iron.....	“	2.75	2	c
Norway Nail Rods.....	“	5	5	c
Black Diamond Cast Steel.....	“	9	10	c
Machinery Steel.....	“	3½	4	c
Spring Steel.....	“	3½	4	c
Common Horse Nails.....	“	8	9	c
Railroad Spikes, 5½x9-16.....	“	2½	2	c
Horse Shoes, 7 keg.....			3	85
Mule Shoes.....			4	85
Steel Boiler Plate.....	“	3½	3½	c
Iron Boiler Plate.....	“	2½	4	c
Boiler Tubes.....		55	off	l

Baltimore Charcoal Wheel Iron (all Baltimore ore).....	\$25	00	@	26	00
Virginia C. B. Charcoal Wheel Iron.....	25	00	@	26	00
Anthracite, No. 1.....	18	00	@	19	00
" " 2.....	16	00	@	17	00
" " 3.....	15	00	@	16	00
" " Mottled and White.....	13	00	@	14	00
Old Iron Rails.....	21	00	@	22	00
No. 1 Wrought Scrap.....	28	00	@	29	00
Old Car Wheels.....	16	00	@	16	50

The most encouraging feature in the entire iron trade is the prompt absorption of the increasing production of crude iron. Your correspondent saw two or three of the leading makers to-day, and endeavored to obtain from them their opinions as to summer probabilities. They take the bullish view of the situation and predict that prices will be stronger for all kinds of standard and special brands of iron, and give as a reason the facts already shown in the reports of the Iron and Steel Association. While business has been seriously impeded by labor strikes throughout the country, the prospects for trade still keep bright. A great amount of business is being held back, and buyers are anxious to place orders, but are deterred by what they consider the uncertain condition of the future. A great deal of muck iron is being made and sold at \$29 to \$30. A large amount of iron is being shipped on old contracts, and but very little new business is coming in. Both sides are satisfied to wait and buyers are willing to pay the ruling prices, even should they be higher when there is a general settling up. The merchant bar mills are working along about as usual, all of them, of course, running short of orders, but nobody in the least concerned, because of the fact that the consumption of iron is fully up to the production. Nails are \$2.20 to \$2.40. A good deal of plate iron is wanted and prices are firm, on account of the number of inquiries that have been received during the past two or three weeks. Skelp iron is also active and sells well.

The wrought iron pipe mills are calling for all the material they can get. There are some inquiries in for large lots of structural iron. There are indications of some large importations of foreign material, among them bridge iron, and it is rumored that a 2,000-ton lot has been placed for delivery in Cleveland. Prices in the iron trade are as high as they dare go for the present, particularly in steel rails, because of the efforts of importers to supply iron for Southern roads. Quotations are \$34.50 to \$36.00. Scrap iron is dull at \$19.00 to \$21.00, according to quality.

Cincinnati Iron Market Report

CINCINNATI, May 10, 1886.

The iron market sustains itself quite as well as could be expected under the trying circumstances. The wonder is that there is anything left of it, in view of the complications and uncertainties of the hour. As a matter of fact, however, a fair volume of business continues to be done, and at prices generally within the range quoted below. As compared with the highest point reached in January, it is probable that prices now average one dollar lower. This in spite of the fact that the cost of manufacture has increased. Some of the largest producers North are preparing to blow out, claiming they can no longer run

HOT-BLAST FOUNDRY.			
Ohio and Southern Strong Coke	No. 1.	\$17 00	@17 50
" " " "	No. 2.	16 00	@17 00
" " " "	No. 3.	15 50	@16 50
Ohio Soft Stonewool,	No. 1.	\$17 00	@18 00
" " " "	No. 2.	16 50	@17 00
Mahoning and Shenango Valley Coke,	No. 1.	18 00	@19 00

CHARCOAL IRON.		
Hanging Rock,	No. 1.....	\$20 00@21 00
"	No. 2.....	10 00@20 00
Tennessee and Alabama,	No. 1.....	18 50@19 00
"	No. 2.....	17 50@18 00

FORGE.	
Strong Neutral Coke.....	\$15 00@15 50
Mottled " "	13 50@14 00
Cold Short.....	14 00@14 50

CAR WHEEL AND MALLEABLE.		
Southern Car-Wheel Iron.....	21	00@25 00
Hanging Rock C. B.....	26	00@28 00
" " W. B.....	21	00@23 00
Lake Superior Malleable.....	23	00@24 00

CINCINNATI, May 10, 1886.

The differences between capital and labor are gradually being adjusted, and the very recent excitement is subsiding. The general feeling has greatly improved over a week ago, and some fair-sized orders have been placed at inside figures. If no further troubles arise, confidence will soon be restored and the market become more firm. We quote for cash on wharf or cars here as follows:

	POUNDRY.	Cash.
Hanging Rock Charcoal, No. 1.....	\$19	50¢20 00
" " " " " " " " " " " " " " " "	18	50¢19 00
Southern Charcoal " " " " " " " " " " " "	18	50¢19 00
" " " " " " " " " " " " " " " "	17	50¢18 00
Strong Neutral Coke, " " " " " " " " " " " "	17	50¢18 00
" " " " " " " " " " " " " " " "	16	50¢17 00
American Scotch, " " " " " " " " " " " "	17	50¢18 00

GREY FORGE.	
Neutral Coke.....	14 50@15 00
Cold Short.....	14 50@15 00

CAR WHEEL AND MALLEABLE.			
Hanging Rock, strictly cold blast.....	25	00@26	00
Hanging Rock, strictly warm blast.....	21	00@21	30
"Cranberry," N. Carolina Warm Blast.....	—	—@23	30
Amherst and Virginia Warm Blast.....	21	50@22	00
Lake Superior Charcoal, all grades.....	23	00@24	00

Louisville Iron Market.

Specially reported by W. B. BELKNAP & CO., Nails,
Wire, Iron, Hardware, Carriage and Wagon
Goods.

LOUISVILLE, KY., May 10, 1886.

The market hereabouts has felt but little the labor disturbance at other points. The fact, indeed, that the influence of such revolutionary proceedings as took place in Chicago and Milwaukee is not more widespread, we think, goes to show that business is on a sound basis, and that values are on such a low scale that merchandise may be considered good property in any event. There is an abiding faith in the people at large that the troubles are temporary in their character, and that American independence and manhood as properly defined will assert itself to the confusion of its enemies. Some advantage is being taken of the situation to argue higher prices based on increased cost of production, as the hours of labor may be lessened and wages increased. Against this, however, are the extraordinary facilities for production and the restricted demand. However, up to the present time, the crop prospects were never better, and with the re-establishment of law and order throughout the country we see no good reason for not expecting an improved trade a little later on.

Bar iron remains unchanged. Prices are low with a moderate demand.

Hoops and bands are dull and somewhat weakish.

Sheet Iron.—There is considerable more inquiry for light sheets, summer deliveries. The mills quoting low prices two weeks since have withdrawn them and holding out for from \$1.00 to \$2.00 advance, and declining almost all deliveries beyond June 30th.

Steel is perhaps firmer than any other item on the list. Cast steel shows no tendency to recover from its low basis, but the ordinary grades of machinery, slab, tire,

sheet, etc., maintain their advances most commendably. The manufacturers of such are disinclined to make any concessions, and we venture to say that what stock is now purchased is being paid for at full rates.

Nails.—For the first time since the strike the supply seems to have overtaken the demand, and although there are known to be extraordinary light stocks in the hands of the mills and jobbers, this has not prevented a sharp competition from setting in and consequently reduction of prices. This latter, however, is now reaching low water mark, and there is considerable inquiry for large lots at a slight shade under current figures.

Wire.—The demand for wire is good, but not heavy. Barb wire has maintained its prices since the last shakedown, while makers of plain wire are offering no important concessions that we can learn of.

List of Patents.

The following Patents were granted to citizens of the Southern States, bearing date May 4, 1886. Reported expressly for this paper by Louis Bagger & Co., Mechanical Experts and Solicitors of Patents, Washington, D. C.

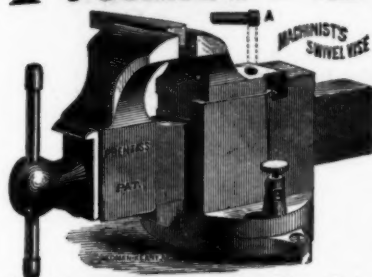
Aderhold, A. J., Birmingham, Ala. Feed-water regulator.....	341,203
Adler, A. S., Baltimore, Md. Apparatus for grading and cutting soles.....	341,804
Avery, G. C., Louisville, Ky. Combined cotton-seed and corn planter.....	341,123
Beazley, J. O., Baltimore, Md. Feed trough for poultry coops.....	341,211
Brown, F. H., Fort Worth, Texas. Magneto telephonic apparatus.....	341,370
Caldwell, B. F., Wheeling, W. Va. Implement for bending metallic roofing plates.....	341,313
Caldwell, B. F., and W. F. Peterson, Wheeling, W. Va. Packing sheet metal roofing.....	341,314
Codwise, B. R., Montrose, Md. Game board.....	340,980
Cypert, J. B., Waynesboro, Tenn. Tire tightener.....	341,408
Davies, J. D., Natchez, Miss. Steam pumping engine.....	340,984
Ellison, A. L., Greensborough, N. C. Com-mode.....	341,135
Heins, C. F., Covington, Ky. Folding convertible crib.....	341,938
Kizziar, J. W., Lipan, Texas. Smoke generator.....	341,335
La Baue, O. J., Edna, Texas. Wire stretcher.....	341,251
Ledbetter, W. H., Dallas, Texas. Spark arrester.....	341,336
Lewis, P. A., Galveston, Texas. Blind slat adjuster.....	341,338
Lloyd, W. D., Johnson City, Texas. Cultivator.....	341,106
Luzenberg, E. A., and E. Sachs, San Antonio, Texas. Stamp canceler.....	341,425
Marshall, E. S., and R. W. Savage, Tyler, Texas. Obtaining a lubricant from the cactus plant.....	341,156
Peterson, Nicolai, Charleston, S. C. Mosquito canopy for bedsteads.....	341,274
Ross, J. S., Nashville Tenn. Electric time system for telephone lines.....	341,110
Ross, J. S., Nashville, Tenn. Electric synchronizing mechanism for clocks.....	341,111
Smith, James, Fruitland Park (near Leesburg), Fla. Combined railway sleeper and chair.....	341,280
Solter, John, and H. R. Robbins, Jr., Baltimore, Md. Prepared cereals and mode of production.....	341,355
Soule, G. W., Meridian, Miss. Cotton press.....	341,070
Specht, Frank, Jacksborough, Texas. Shingling bracket.....	341,178
Stoner, Abraham, Stony Point, La. Turning machine.....	341,182
Wait, W. L., Greenville, S. C. Car coupler.....	341,190
Williams, S. B., Sailor's Rest, Tenn. Plow attachment, (reissue).....	10,719
Williams, W. F., and V. H. Klinefelter, Baltimore, Md. Reverse-seamer for sewing machines.....	341,364
Wilson, J. C., Brownwood, Texas. Feed cutter.....	341,199
Wolford, C. H., Louisville, Ky. Carburetor.....	341,299
Woodward, J. L., and R. Montfort, Butler, Ga. Whiffletres.....	341,302
Wright, A. W., Kyle, Texas. Combination wrench.....	341,117

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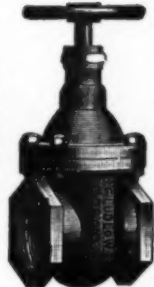
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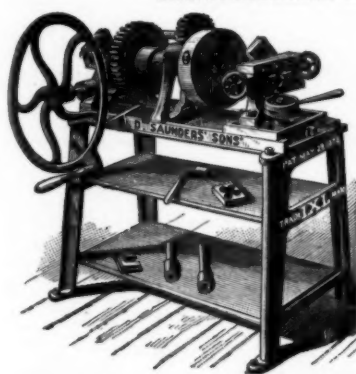
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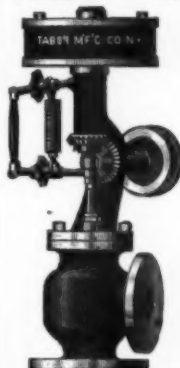
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References: { Croton Magnetic Iron Mines, Brewster's, N. Y.
Crown Point Iron Co., Crown Point, N. Y.
Belvidere Iron Co., 52 Broadway, N. Y.
Sea Island Chemical Co., Beaufort, S. C.

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 Frames, &c.
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 Kimball's Patent Solid Steel Shovels and Spades.
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 H. W. Reed—Brick and Plastering Trowels, Shoe Knives, &c.
 Scott Manufacturing Co.—Peach and Apple Parers, Ice Creepers, &c.
 Henry Seymour Cutlery Co.—Seymour's and Massachusetts Shears.
 B. Seitz.—Root Hames.
 Underhill Edge Tool Co.—Hatchets, Adzes, &c.
 Walker Horse Shoe Co.—Patent Horse and Mule Shoes.
 R. Wallace & Son, Manufacturers.—Plated Ware.
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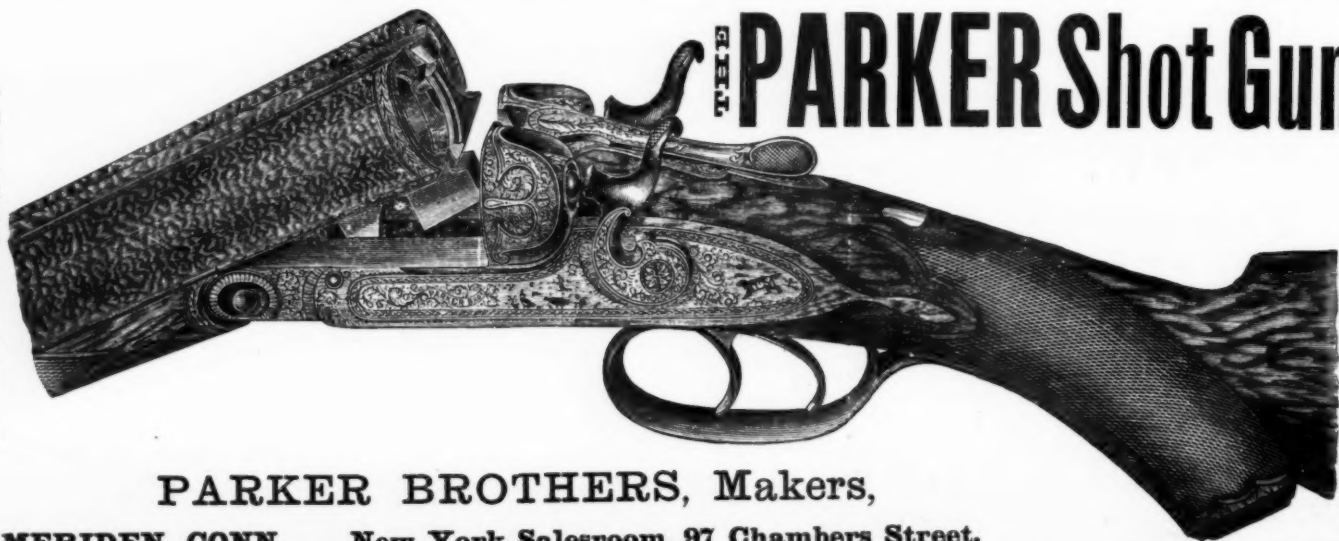
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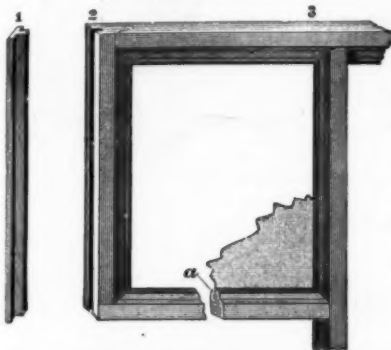
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Cabinet, Gaylord....	of some numbers Jan. 1,
Cabinet, Bridgeport....	1881, dis 25 % to 1 %
Cabinet, P. & C....	dis 40 %
Trunk, new list, Jan. 1, 1881....	dis 15 % to 1 %
Yale Lock Co., Flat Key....	dis 40 %
Plate....	dis 33 % to 1 %
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Penfield Block Co., Apple, Hickory and	
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Dixon's (P. S. & W.) Nos. 1, 2, 3, 4....	dis 30 % to 1 %
Perry's, Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10....	dis 30 % to 1 %
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Woodruff's (P. S. & W.) Nos. 100, 150....	dis 30 % to 1 %
Hales'....	dis 30 % to 1 %
Kieser's No. 55....	dis 30 % to 1 %
Kieser's Gem....	dis 30 % to 1 %
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Kieser's Monarch....	dis 30 % to 1 %
Beef Shaver, (Enterprise Manf. Co.)....	dis 25 %
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Stebbins Patterns....	dis 70 % to 1 %
Stebbins Genuine....	dis 70 % to 1 %
Stebbins Tinned Ends....	dis 70 % to 1 %
Chase's Hard Metal....	dis 70 % to 1 %
Self-Measuring, (Enterprise)....	dis 20 %
Lincoln's Pattern....	dis 60 % to 1 %
Weed's....	dis 15 %
Boss Nos. 1, 2, 3, 4....	dis 30 % to 1 %
Boss, Japanned Finish....	dis 60 % to 1 %
Boss, Bronze Finish....	dis 50 % to 1 %
NUTS AND WASHERS.	
Square Nuts....	8 c off list.
Hexagon Nuts....	8 1/2 c off list.
Washers....	7 1/2 c off list.
OILERS.	
Zinc and Tin....	dis 60 % to 1 %
Brass and Copper....	dis 50 % to 1 %
Malleable (Hammer's)....	dis 50 % to 1 %
PINKING IRONS.	
Per dozen....	75 cts. net
PLATING MACHINES.	
Astor Plating Machine....	each \$15, dis 20 %
Crown Plating Machine....	dis 25 %
6 in., 8 in., 10 in., 12 in. each....	
PLANES AND PLANE IRONS.	
Bench, First Quality....	dis 20 %
Bench, Second Quality....	dis 25 %
Molding....	dis 15 %
Bailey's (Stanley R. & L. Co.) New list, Jan. 1879....	dis 20 % to 1 %
The Stanley (S. R. & L. Co.) new list, January 1879....	dis 20 % to 1 %
Bailey's....	dis 20 % to 1 %
Plane Irons, Butcher's....	dis 50 % to 1 %
Plane Irons, Auburn Tool Co....	dis 20 %
Plane Iron, Ohio Tool Co....	dis 20 %
Plane Irons, Sandusky Tool Co....	dis 20 %
PLIERS AND NIPPERS.	
Button's Patent....	dis 33 % to 1 %
Hall's Pat. Compound Lever Cutting Nippers....	dis 25 %
No. 2, 5 in. \$13.50; No. 4, 7 in., \$21 doz....	dis 25 %
Gas Pliers....	dis 50 %
Cronk's Patent Cutting Pliers....	dis 35 %
8 inch \$15.00; 10 inch \$21.00....	
PUMBS AND LEVELS.	
Diston's....	dis 40 %
Stanley R. & L. Co.'s Pat. Adjustable, dis 65 % to 1 %	
Stanley R. & L. Co.'s Non-Adjustable, dis 65 % to 1 %	
Chapin's Patent Adjustable....	dis 65 % to 1 %
Chapin's Non-adjustable....	dis 65 % to 1 %
Standard Rule Co.'s New Adjustable....	dis 65 % to 1 %
Standard Rule Co.'s Non-Adjustable....	dis 65 % to 1 %
Pocket Levels....	dis 65 % to 1 %
RAIL.	
Sliding Door, Wrought Brass....	dis 40 %
Sliding Door, Bronze Wrt. Iron....	dis 35 %
Sliding Door, Iron, Painted....	dis 10 % to 1 %
Bara Door....	dis 30 %
Per 100 feet....	dis 30 %
B. D. for N. E. Hangers—Small. Med. Large....	
Per 100 feet....	dis 30 %
RIVETS.	
Iron and Tinned, new list, Dec. 10, 1881....	dis 50 %
In bulk, new list, Dec. 10, 1881....	dis 45 %
Copper Rivets and Burrs....	dis 60 % to 1 %
Nos. 7, 8, 9, 10, 11, 12, 13, 14, 15....	
49c, 50c, 52c, 54c, 56c, 58c, 60c, 62c, 70c....	
RIVET SETS....	dis 40 %
RODS.	
Stair, Brass....	dis 25 %
Stair, Black Walnut....	dis 25 % to 1 %
RULES.	
Boxwood....	
Ivory....	
Chapin's....	dis 80 %
Standard....	dis 50 % to 1 %
Stanley....	dis 50 % to 1 %
Stevens & Co....	dis 50 %
Stevens & Co. Miscellaneous....	dis 50 % to 1 %
SAD IRONS.	
Self-Heating, Charcoal....	dis 20 % to 1 %
Mrs. Pott's Irons....	dis 35 %
Enterprise Star Irons, new list, July 20, '82....	dis 35 %
Comb'd Fluter and Sad Iron....	dis 15 %
Common Sad Irons....	dis 25 % to 1 %
SAND PAPER.	
Baeder & Adamson's Flint, 000 to 1 1/2....	\$4.50 r.m.
Baeder & Adamson's Flint, 2, 2 1/2 to 3....	5.00 r.m.
Baeder & Adamson's Flint, Assort'd 4.75 r.m....	
Baeder & Adamson's Star....	3.75 r.m.
Baeder & Adamson's Emery r.m. \$6.50 to \$11.50....	
Bartle's Sand, Flint and Emery Paper....	dis 30 % to 1 %

Clancy's No. 100, per gross....	dis 50 %
Nimick & Brittan Mfg. Co....	dis 50 %
SASH LOCK.	
Common....	dis 14c. net
Patent....	dis 17c. net
Silver Braided Lake Hemp....	dis 50c, dis 10 %
Silver Braid, Lake White Cotton....	dis 50c, dis 10 %
Silver Braided Lake Drab Cotton....	dis 50c, dis 10 %
Silver Lake Cable Laid, Bengall Unbleached Hemp, 17 lbs....	dis 10 %
Russian Hemp, 19 lbs....	dis 10 %
Italian Hemp, 34 lbs....	dis 10 %
Samson Braided, white cotton....	dis 30 %
Samson Braided, drab cotton....	dis 30 %
SASH WEIGHTS.	
Solid Eyes, in 500-lb. lots and over, 1 1/2 c. net	
SAUSAGE STUFFERS OR FILLERS.	
Miles....	dis 25 % to 1 %
Enterprise Mfg. Co....	dis 30 %
Monarch....	dis 40 %
SAWS.	
Boynton's Lightning Cross Cuts, new list....	dis 40 %
Boynton's Circular and Mill....	dis 40 %
Boynton's Ice....	dis 25 %
Boynton's Lightning Hand, Panel and Rip....	dis 25 %
Disston's Circular....	dis 40 %
Disston's Mill....	dis 40 %
Disston's Cross Cut....	dis 40 %
Disston's Hand, Panel, Rip, &c....	dis 20 %
Hubbard, Bakewell & Co., Circular Saws....	dis 40 % to 1 %
Hubbard, Bakewell & Co., Cross Cut....	30c. ft.
Hubbard, Bakewell & Co., One-Man's, X Cut....	
Hubbard, Bakewell & Co., Mill Saws....	dis 40 % to 1 %
Peace Circular and Mill....	dis 40 %
Peace Hand, Panel and Rip....	dis 25 %
Peace Cross Cuts....	dis 35 %
Peace Band Saws, all widths....	dis 10 %
Webster Cross Cut, with handles....	dis 25 % to 1 %
Griffin's Hack Saws and Blades....	dis 30 %
SAW FRAMES.	
White....	dis 10 % to 1 %
Saw Rods....	dis 10 % to 1 %
SAW SETS.	
Stillman's Genuine....	dis 30 % to 1 %
Stillman's Imitation....	dis 30 % to 1 %
Common Lever....	dis 30 % to 1 %
Leach's....	No. 6, \$8.00; No. 1, \$15; dis 15 %
Hammer, Hockkiss....	\$15.00, dis 10 %
Aiken's Genuine....	\$13.00, dis 50 %
Aiken's Imitation....	\$7.00, dis 50 %
Disston's....	dis 20 %
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SCALES.	
Hatch, Counter, No. 171....	dis 30 % to 1 %
Hatch, Tea, No. 161....	dis 30 % to 1 %
Union Platform, Keystone....	dis 45 %
Chicago Scale Co....	dis 20 %
Fairbanks'....	dis 20 %
Forsyth Scale Co....	dis 45 %
Howe's....	dis 20 % to 1 %
Chatillon's Grocers'....	dis 40 %
Chatillon's Eureka....	dis 25 %
Family Universal....	dis 50 %
Family Favorite....	dis 30 %
Family Turnbull's....	dis 30 %
Scale Beams, List of Jan. 1, 1882....	dis 0 %
SCRAPERS.	
Adjust. Box Scraper (S. R. & L. Co.) \$6.50, dis 20 % to 1 %	
Box, 1 Handle....	dis 10 %
Box, 2 Handle....	dis 10 %
Foot....	dis 45 % to 1 %
Ship, common....	dis 30 %
Wilson Mfg. Co....	dis 10 %
SCREW DRIVERS.	
Douglas Mfg. Co....	dis 20 % to 1 %
Diston's....	dis 40 %
Cowles Mfg. Co....	dis 50 % to 1 %
Stanley Rule & Level Co.'s Var. Holes....	dis 50 %
Stanley Rule & Level Co.'s Black Holes....	dis 40 % to 1 %
Ratchet....	dis 33 %
Clark's Patent....	dis 25 %
Shepardson....	dis 25 %
SCREWS.	
Standard new list, Feb. 15....	
Flat Head Bright....	dis 75 % to 1 %
Round Head Blued....	dis 70 % to 1 %
Flat Head Brass....	dis 75 %
Round Head Brass....	dis 70 %
Flat Head Blued (add 1/2 % to net)....	dis 75 % to 1 %
Brass and Silver Capped....	dis 40 %
Japanned Flat Head....	dis 70 % to 1 %
Coach, Patent Gimlet Point....	dis 75 %
Coach, Common or Lag....	dis 60 % to 1 %
Bed....	dis 10 %
Machine, Flat Head, Iron....	dis 55 %
Machine, Round Head, Iron....	dis 50 %
Bench, Iron....	dis 50 % to 1 %
Bench, Wood, Hickory....	dis 30 % to 1 %
Bench, Wood, Hickory....	dis 20 % to 1 %
Hand, Wood....	dis 20 % to 1 %
Hand Rail, Sargent's....	dis 60 % to 1 %
Hand Rail, Humason, Beckley & Co.'s....	dis 40 % to 1 %
Hand Rail, Am. Screw Co., list Jan. 1, '81....	dis 70 %
Jack (Wilson's)....	dis 25 %
SCREEN FRAMES AND MIXTURES.	
Standard Window Screens No. 1, 2, 3, 4, 5....	dis 25 % to 1 %
Door....	dis 15 %; dis 50 % to 1 %
Window Corner Irons, No. 3, doz. \$1's, \$2's....	
Door....	No. 6, " \$3
Door Latches, # dozen, \$3.60....	dis 50 %
Porter's Patent Window and Door Screen Frames....	
FEET DOZ. IM. BIK. WHITE. WALNUT.	
No. 20....	\$2.75 \$3.25
No. 21....	2.25 4.00
No. 22....	5.50 6.75
No. 23....	6.00 7.50
No. 30....	9.00 11.00
Porter's Corners—	
No. 0. Corners and Sticks complete for a three-foot window, # doz sets....	\$4
No. 1. Set for Window, # doz sets, Bronze, \$2.40; Nickel, \$5.62....	
No. 1 1/2 " " # doz sets, Bronze, \$3.25; Nickel, \$7.50....	
No. 4 " " # doz sets, Bronze, \$4.00; Nickel, \$8.00....	
No. 3/4 " " or door, # doz sets, Bronze, \$1.20; Nickel, \$3.00....	
No. 4 1/2 " " or door, # doz sets, Bronze, \$2.00; Nickel, \$4.00....	
No. 2 1/2 " " Door, # doz sets, Bronze, \$6.75; Nickel, \$15.00....	
No. 3 " " # doz sets, Bronze, \$12.00; Nickel, \$24.00....	
Window screen frames (Stuart's)....	dis 25 %
SCISSORS.	
American (Cast) Iron....	dis 70 % to 1 %
Pruning....	see Pruning Hooks and Shears
Barnard's Lamp Trimmers....	dis 40 %
Tinners....	dis 15 %
Massachusetts....	dis 80 % to 1 %
Seymour's....	dis 60 % to 1 %
Jersey Shears....	dis 80 %
J. Wiss & Son, Nickel, 50 % to 1 %; Japanned, 60 % to 1 %	

Sliding Door, M. W. & Co., List....	dis 45 % to 1 %
Sliding Door, R. & E. List....	dis 60 % to 1 %
Sliding Door, Patent Roller....	dis 60 % to 1 %
Sliding Door, Pt. Roller, Hatfield's....	dis 60 % to 1 %
Sliding Door, Russell's Anti-Friction....	dis 60 % to 1 %
Also see Hangers....	
SHOVELS AND SPADES.	
Ames, New List, July 1, 1882....	dis 15 %
Griffiths....	dis 50 % to 1 %
Remington's (Lowman's Patent)....	dis 30 %
Rowland's....	dis 60 %
Kimball's....	dis 35 %
Lippincott, new list....	dis 20 %
Hussy, Riss & Co....	dis 15 %
SPOKE TRIMMERS.	
Bonney's....	dis 10, dis 40 % to 1 %
Stearns....	dis 10, dis 40 % to 1 %
No. 1, \$15; No. 2, \$12 doz....	dis 55 % to 1 %
Douglass'....	dis 15 %
Wm. Rogers Manf. Co....	dis 50, 50 % to 1 %
Holmes, Booth & Hayden....	dis 40 % to 1 %
Brown Bros....	dis 40 % to 1 %
Wallace's Steel Silver Plated....	dis 33 % to 1 %
Rogers Bros 1847....	dis 50 %
C. Rogers & Wm....	dis 40, 10 % to 1 %
SILVER PLATED HOLLOW WARE.	
Wm. Rogers Manf. Co....	dis 40, 15 % to 1 %
Meriden Britannia Co....	dis 33 % to 1 %
SOLDERING IRONS AND COPPERS.	
Covert's Soldering Irons....	dis 35 %
Covert's Adjustable Coppers....	dis 35 %
SPOONS.	
Britannia....	dis 60 % to 1 %
Tinned, Iron, Table and Tea....	dis 65 %
Tinned Iron Basting....	dis 65 %
German Silver....	dis 40 %
STONE.	
Hindustan No. 1, 5c; Axe, 8c....	net
Sand Stone....	dis 33 % to 1 %
Washita Stone....	No. 1, 1 lb., 16c. net.
Washita Stone, Slips....	No. 1, 1 lb., 45c. net.
Arkansas....	\$1.50 lb., net.
SQUARES.	
Steel....	dis 60 % to 1 %; full cases, dis 60 % to 1 %
Iron....	dis 60 % to 1 %; full cases, dis 60 % to 1 %
Nickel Plated....	add \$2.50 \$4 doz net.
Try Square and T Bevels....	dis 50 % to 1 %
Disston's Try Square and T Bevels....	dis 40 %
TACKS, BRADS, &c.	
[Less 10 % for cash if paid by 6th of month following sale]	
American Iron Carpet Tacks, all kinds....	dis 65 %
Steel Carpet Tacks, all kinds....	dis 60 %
Swedes Iron Carpet Tacks, all kinds....	dis 60 %
Swedes Iron Tacks....	dis 60 %
Swedes Iron Upholsterers' Tacks....	dis 60 %
Tinned Swedes Iron Tacks....	dis 60 %
Tinned Swedes Iron Upholsterers' Tacks....	dis 60 %
American Iron Cut Tacks....	dis 55 %
Gimp and Lace Tacks....	dis 50 %
Copper Tacks....	dis 50 %
Copper Finishing and Trunk Nails....	dis 50 %
Cigar Box Nails....	dis 50 %
Finishing Nails....	dis 50 %
Trunk and Clout Nails....	dis 50 %
Tinned Trunk and Clout Nails....	dis 50 %
Basket Nails....	dis 50 %
Chair Nails....	dis 50 %
Zinc Glaciers' Points....	dis 45 %
Common and Patent Brads....	dis 45 %
Hungarian Nails and Miners' Tacks....	dis 45 %
Tinned Capped Trunk Nails....	dis 30 %
Looking Glass Tacks....	dis 25 %
Picture Frame Points....	dis 25 %
Leathered Carpet Tacks....	dis 25 %
Brush Tacks....	dis 25 %
TAP BORERS.	
Common and Ring....	dis 20 %
Ives' Tap Bore....	dis 10 % to 1 %
Enterprise Mfg. Co....	dis 25 %
TOBACCO CUTTERS.	
Enterprise Mfg. Co (Champion)....	dis 25 %
Wood Bottom....	dis 12.00, dis 40 % to 1 %
All Iron....	dis 40 % to 1 %
Wilson's....	dis 35 %
THERMOMETERS.	
Tin Case....	dis 75 % to 1 %
Storm Glasses....	dis 25 % to 1 %
TOR CALKS.	
Winsted....	dis 5 %
TRAPS.	
Game, Newhouse....	dis 35 %
Game, Oneida Pattern....	dis 60 % to 1 %
Game, Blake's Patent....	dis 40 % to 1 %
Mouse, Wood, Choker....	dis 10 % to 1 %
Mouse, Round Wire....	dis 10 % to 1 %
Mouse, Wire....	dis 10 % to 1 %
Mouse, Catch-em-alive....	dis 10 % to 1 %
Cyclon Mouse....	dis 75 %
Ideal Mouse....	dis 10 % to 1 %
Box....	dis 10 % to 1 %
Rat, "Decoy"....	dis 10 % to 1 %
Delusion Mouse, per doz....	dis 1.50
TROWELS.	
Lothrop's Brick and Plastering....	dis 25 %
Reed's Brick and Plastering....	dis 15 %
Disston's Brick and Plastering....	dis 20 %
Clement & Maynard's....	dis 20 %
Worrall's Brick....	dis 20 %
Braden & Walby's....	dis 20 %
Garden....	dis 55 %
TRUCKS (WAREHOUSE, &c.)	
Handy Truck....	\$2.50 net
Penfield Block Co's list, 1882....	dis 35 %
Peerless, with Cogs, No. 3....	dis 50 %
Peerless, with Cogs, No. 4....	dis 60 %
Eureka, No. 2....	dis 40 %
VISES.	
Cheney's Combined Vise and Anvil....	dis 30 %
Solid Box—Wilson's....	dis 50 % to 1 %
Trenton....	dis 45 %
Iron City Tool Works....	dis 50 %
Bench—Wilson's....	dis 25 %
" Trenton....	dis 25 %
" Parker's....	dis 20 %
" Prentiss....	dis 25 %
" Honney's....	dis 35 %
Well Wheels....	dis 60 % to 1 %
Stephen's Patent Vises....	dis 50 % to 1 %
WIRE.	
Brass and Copper, list of Jan. 17, 1884....	dis 30 %
Bright and Annealed....	Nos. 10, 18, dis 50 % to 1 %

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36x36 inches	\$3.25	per doz. sets.
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48x48 "	4.75	" "
54x54 "	5.25	" "

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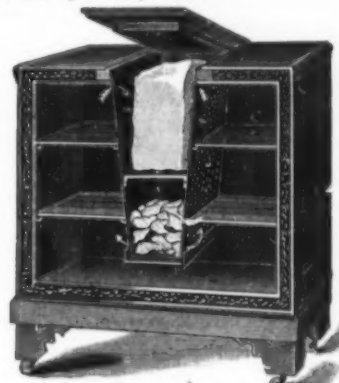
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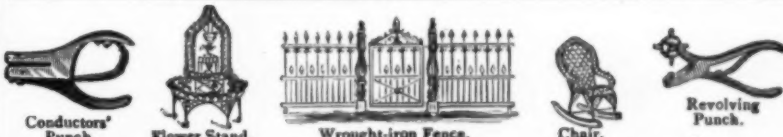


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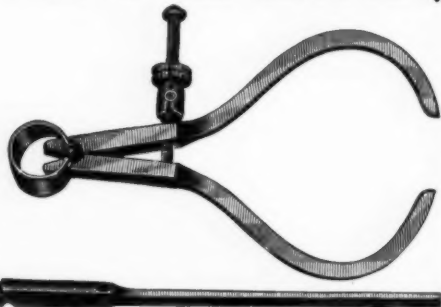
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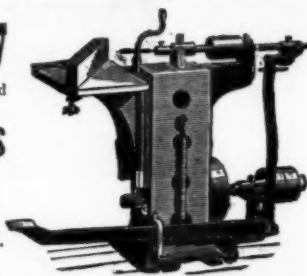
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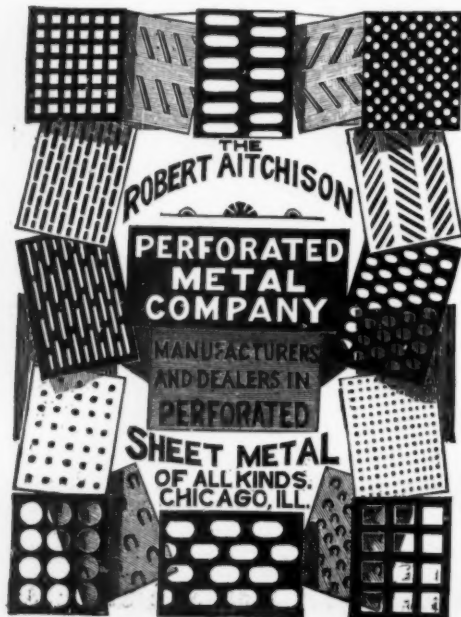
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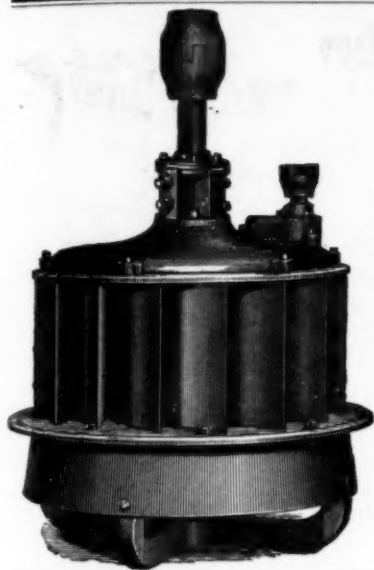
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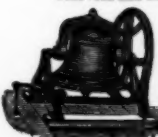
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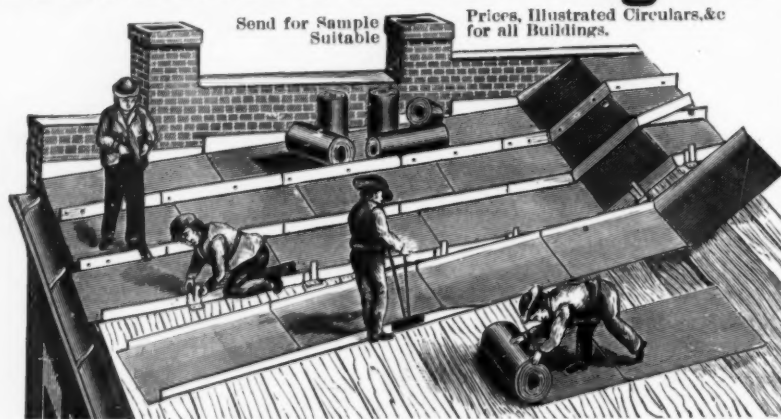
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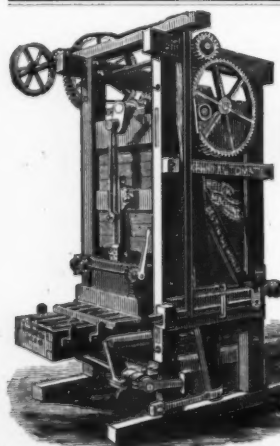
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Boiler repairs, and the vexation by shutting down when in a hurry, are saved. The trouble and expense of throwing out a poor heater and putting in a good one are saved by the use of **THE BERRYMAN FEED WATER HEATER AND PURIFIER.**

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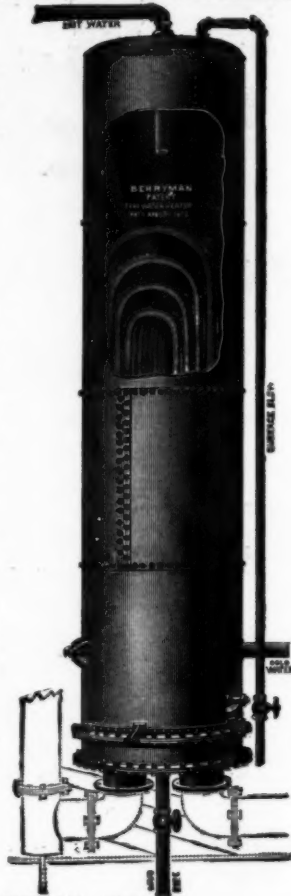
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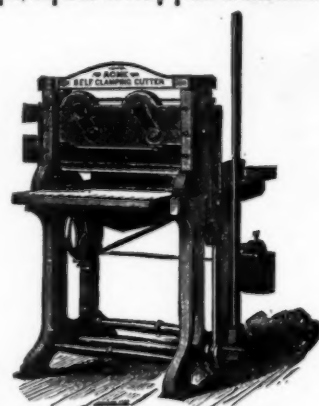


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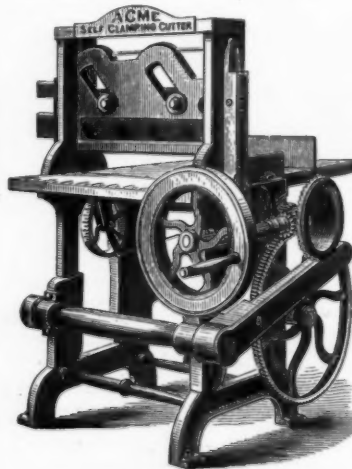
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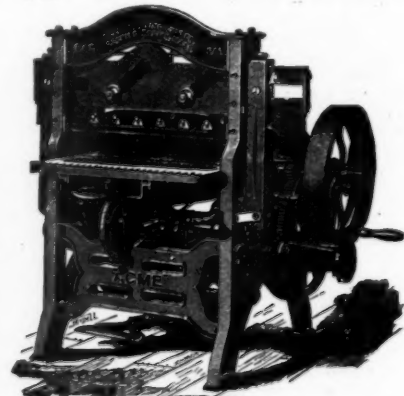


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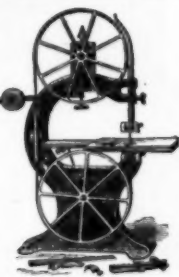
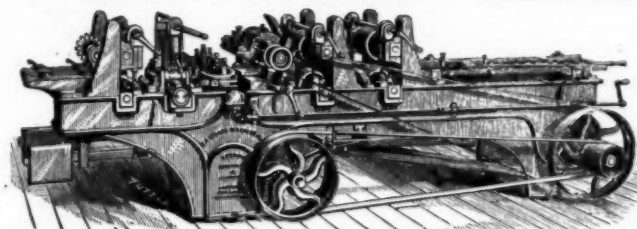
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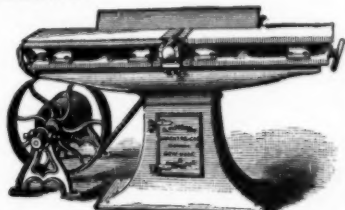
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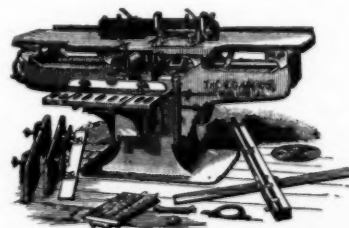
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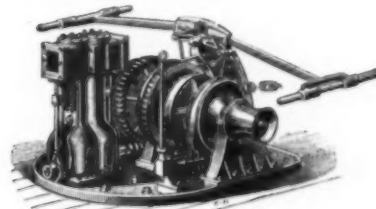
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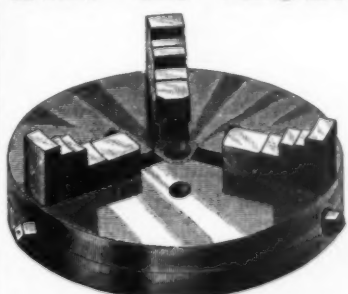
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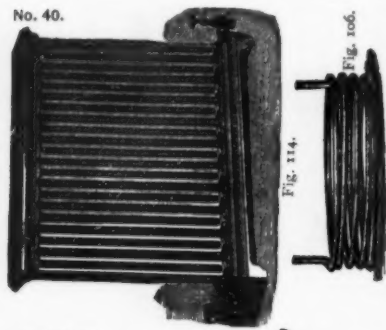


Fig. 114.

Fig. 106.

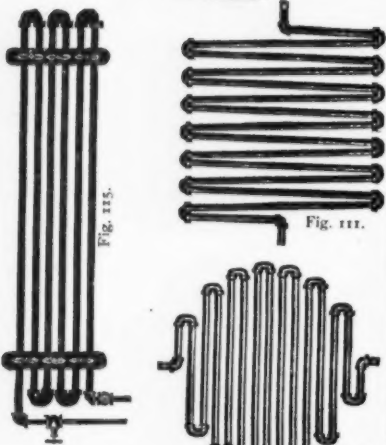


Fig. 115.

Fig. 111.



Fig. 118.

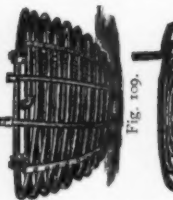


Fig. 107.



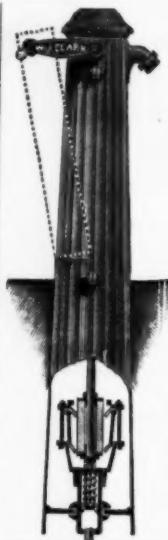
Fig. 105.

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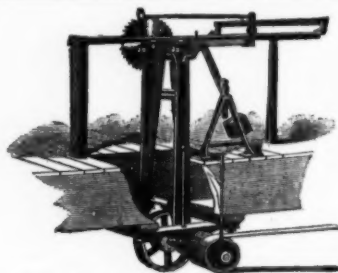
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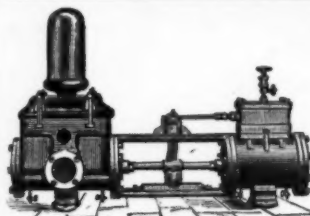
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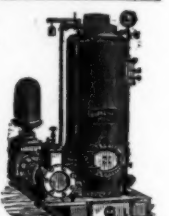
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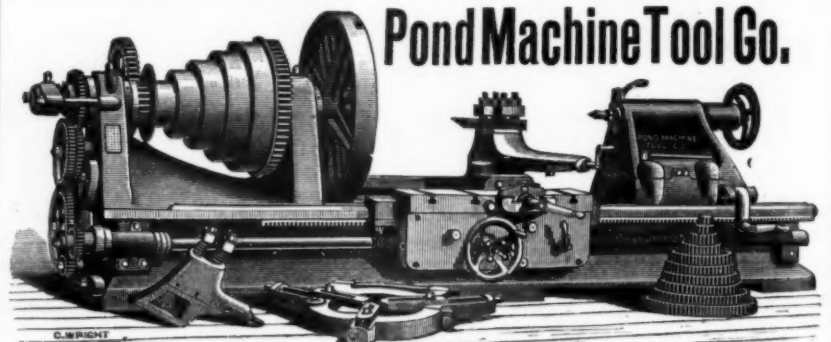
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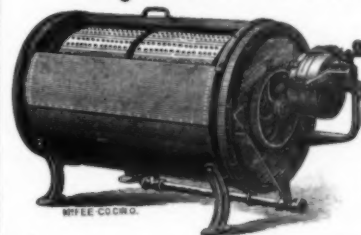
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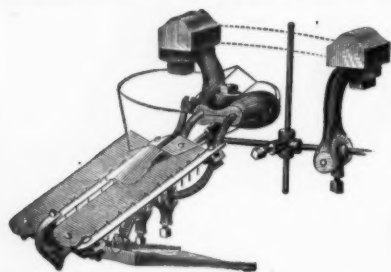
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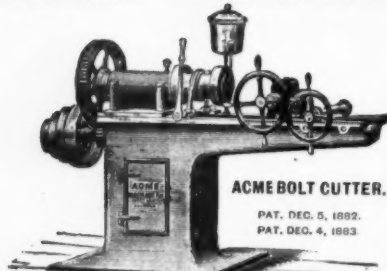
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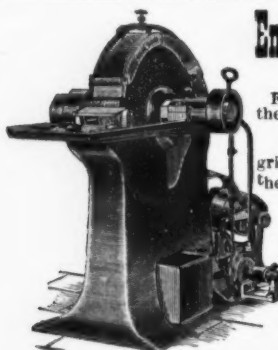


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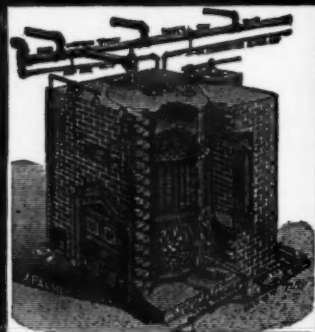
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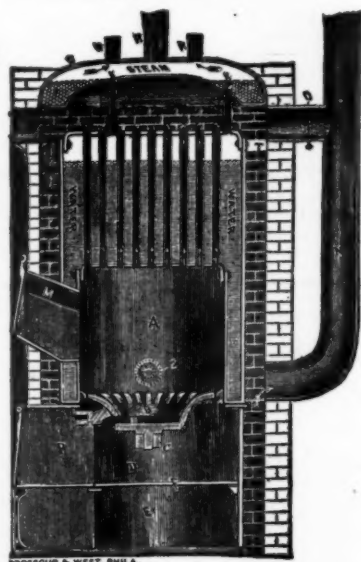
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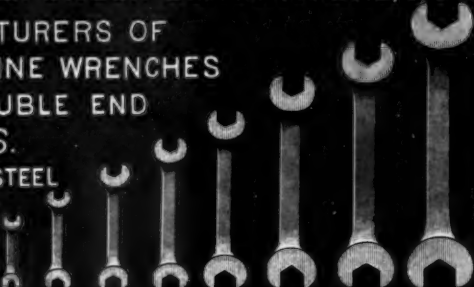


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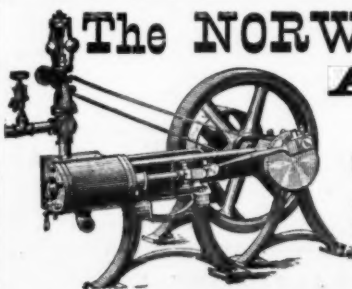
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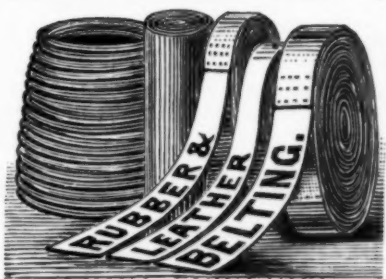
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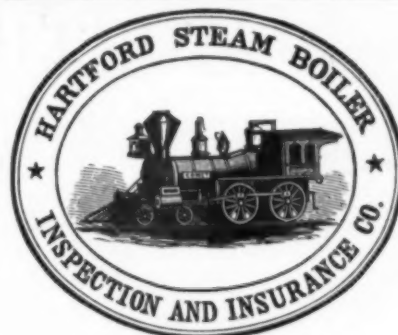
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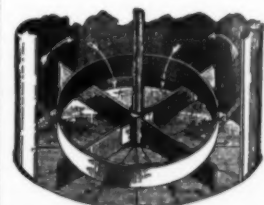
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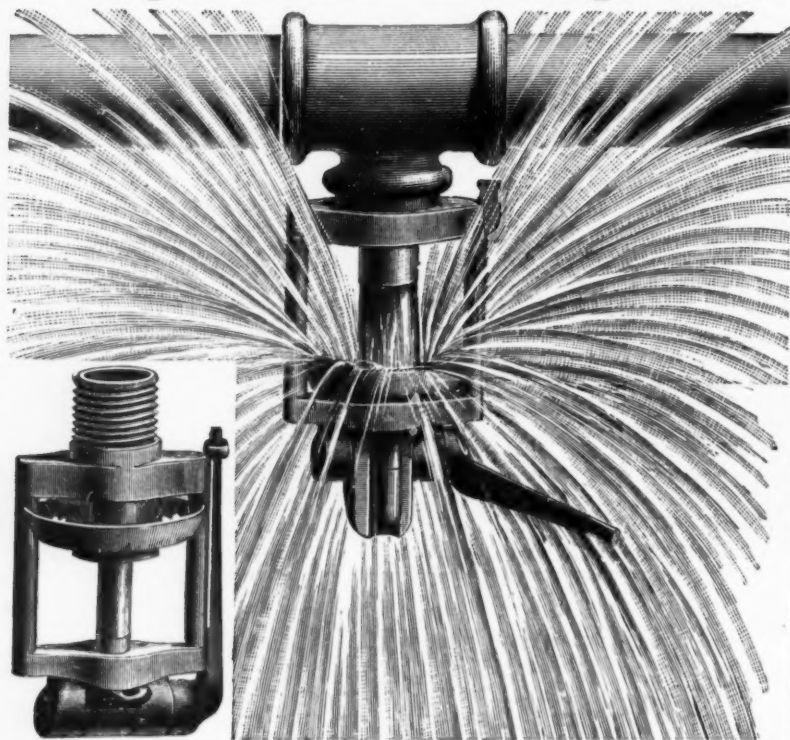
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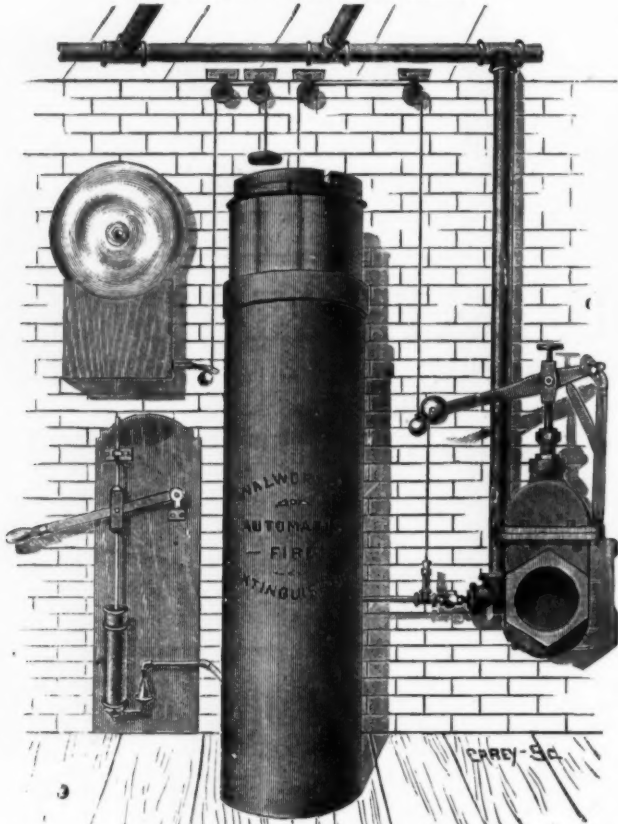
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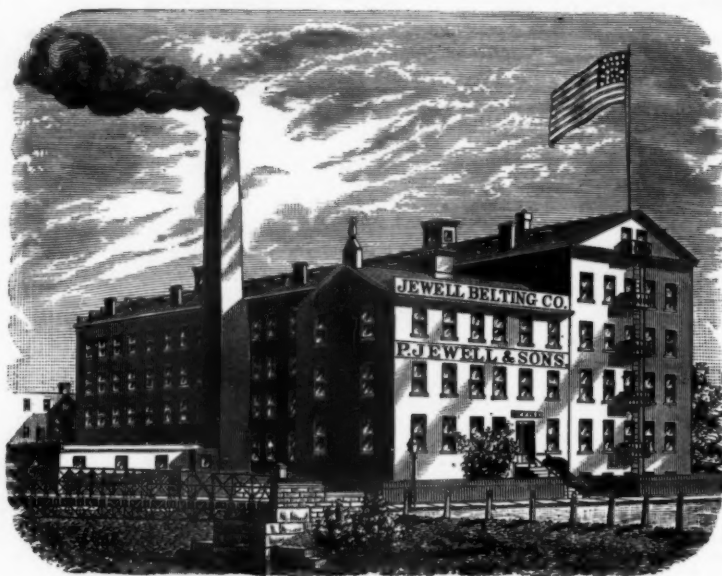
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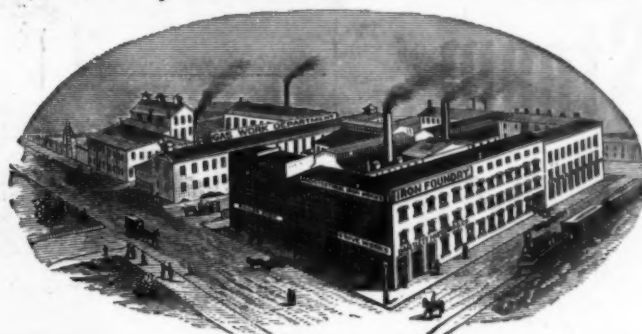
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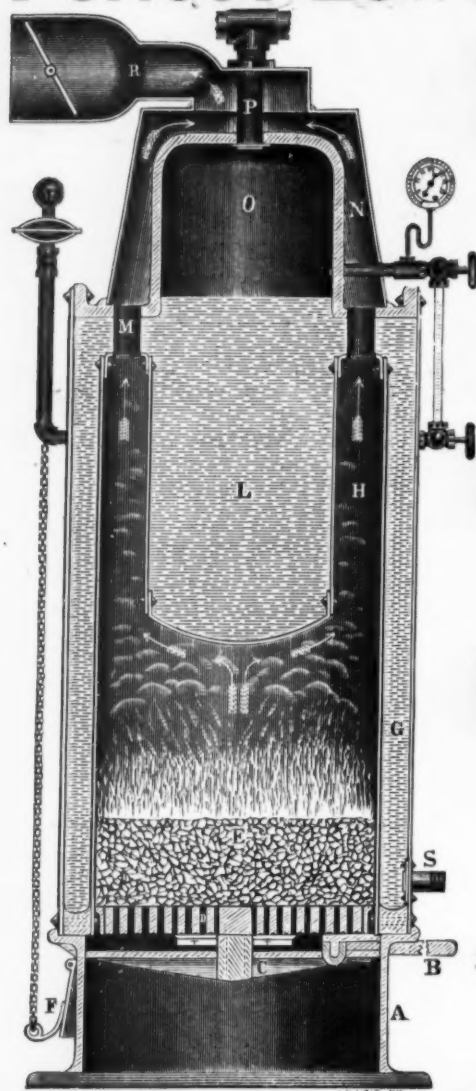
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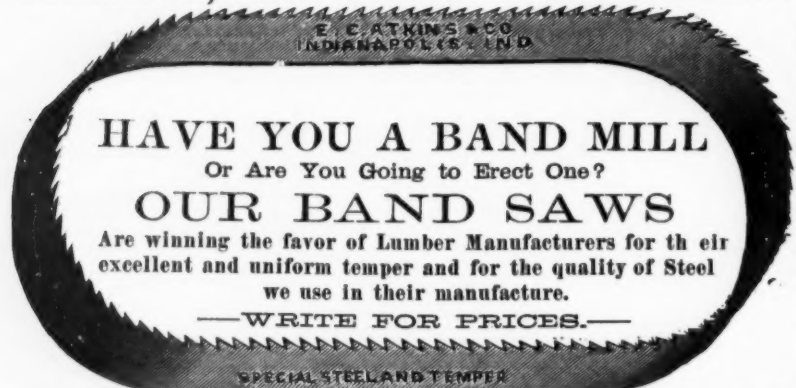


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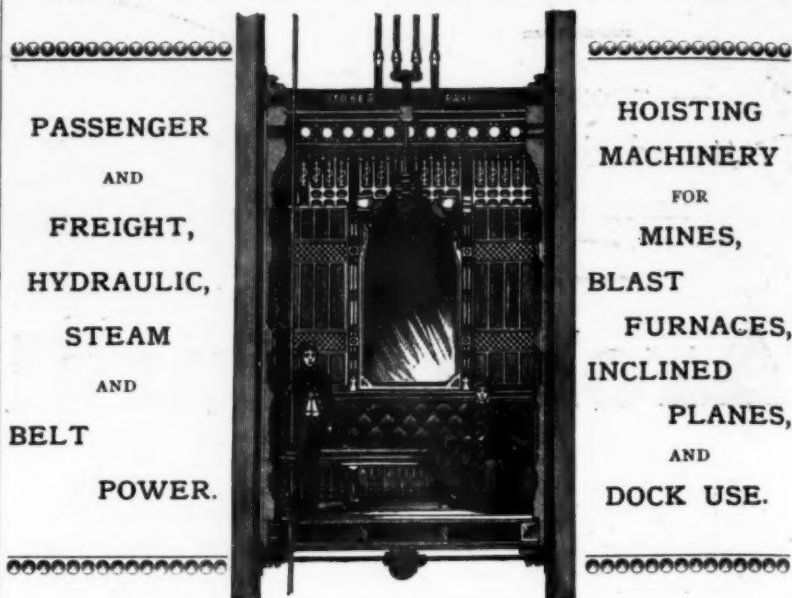
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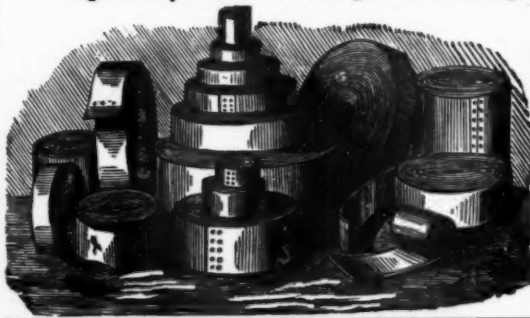
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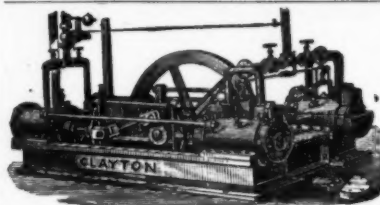
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